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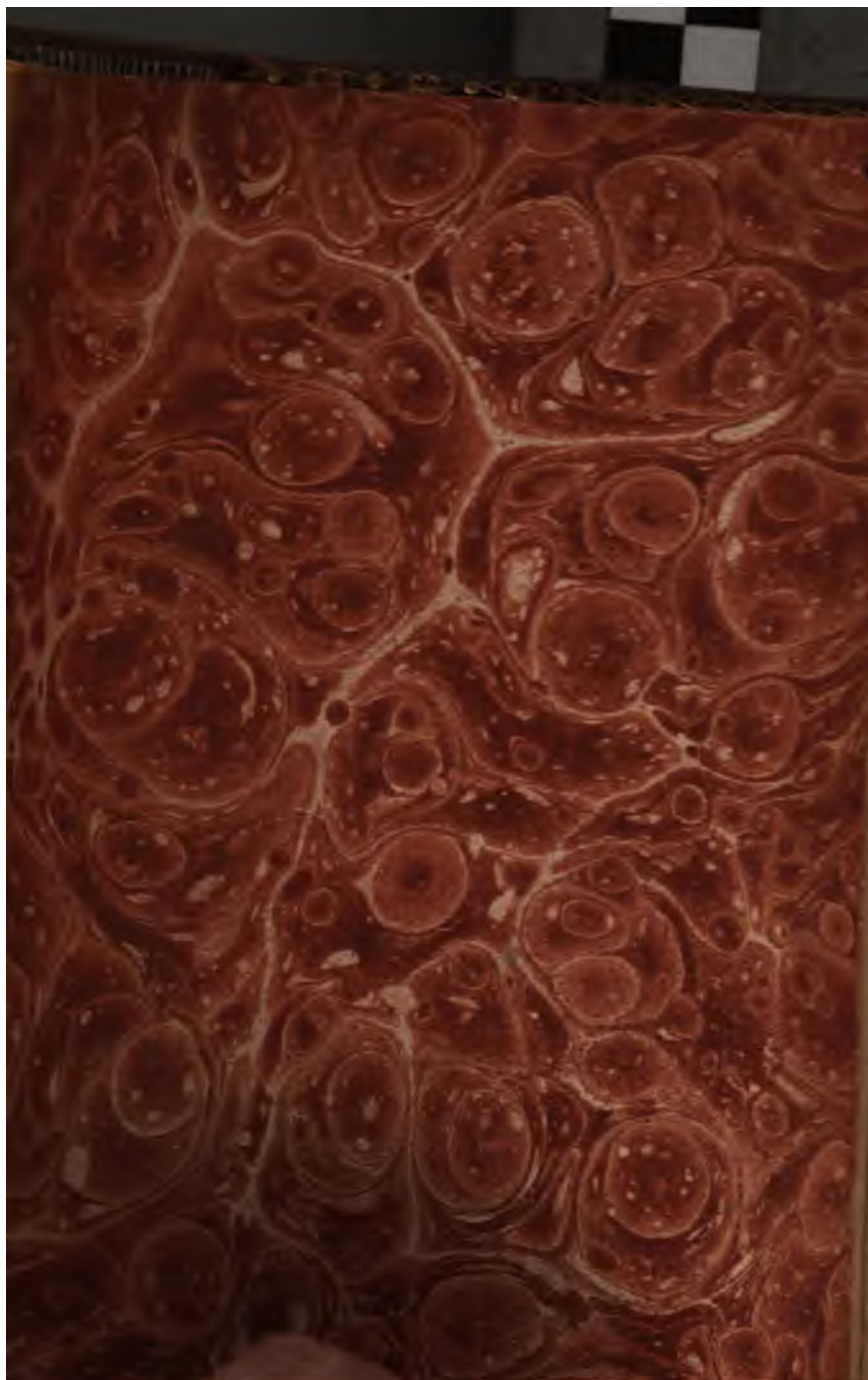


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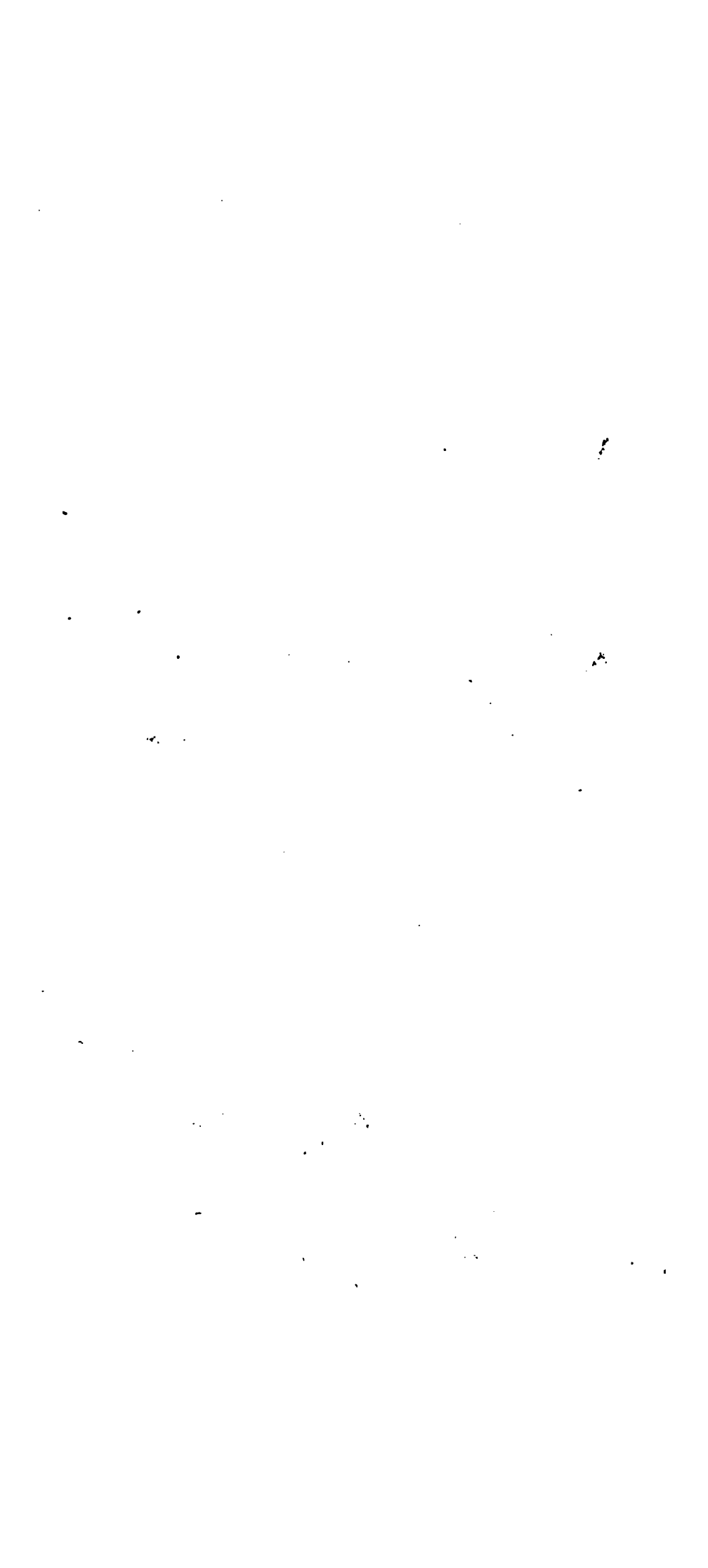
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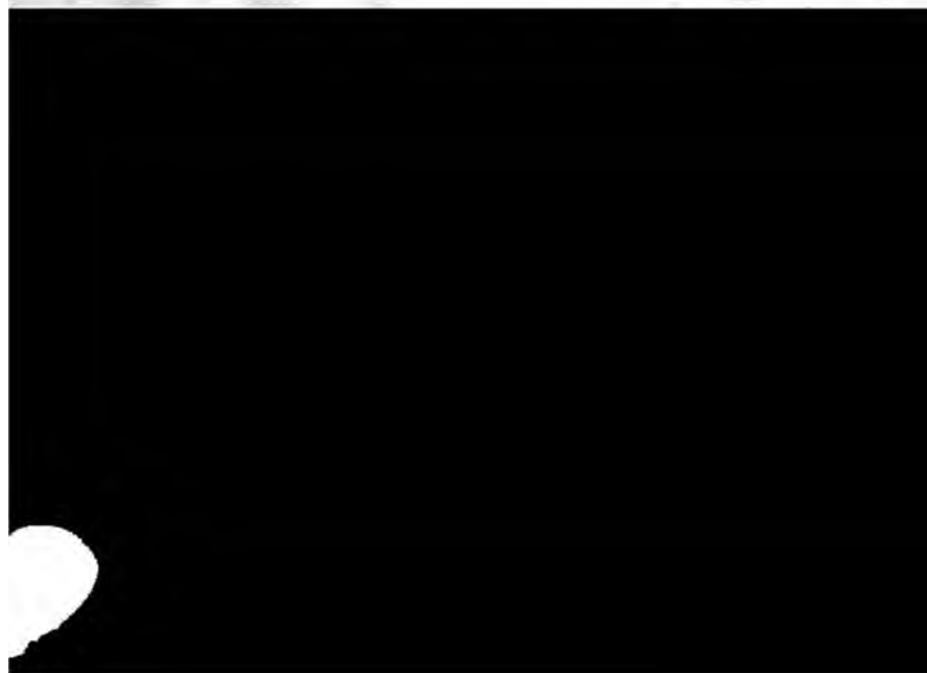




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ENGLISH BOTANY;
OR,
COLOURED FIGURES
OF
BRITISH PLANTS,
WITH THEIR
ESSENTIAL CHARACTERS, SYNONYMS,
AND PLACES OF GROWTH:
TO WHICH WILL BE ADDED,
OCCASIONAL REMARKS.

BY
JAMES EDWARD SMITH, M.D. F.R.S.
MEMBER OF THE IMP. ACAD. NATURÆ CURIOSORUM, THE
ACADEMIES OF STOCKHOLM, UPSAL, TURIN,
LISBON, LUND, PHILADELPHIA, AND THE
NAT. HIST. SOCIETY OF PARIS;
PRESIDENT OF THE LINNEAN SOCIETY.

THE FIGURES BY
JAMES SOWERBY, F.L.S.

—“VIRESCERE ACQUIRIT EUNDO.”—*Virg.*

VOL. VI.

LONDON:

PRINTED FOR THE EDITOR,
And sold at No. 2, Mead Place, near the Asylum; by Messrs. WHITE,
Booksellers, Fleet-street; JOHNSON, St. Paul's Church-yard;
DILLY, in the Poultry; and by all Booksellers, &c.
in Town and Country.

1807.

[Printed by Richard Taylor and Co. Shoe-Lane.]

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HERBARIUM

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MONOTROPA hypopithys.

Yellow Bird's-nest.

DECANDRIA Monogynia.

GEN. CHAR. *Calyx* none. *Petals* ten; the five outermost hollowed at the base, and producing honey. *Capsule* five-valved. *These numbers respect the terminal flower only.*

SPEC. CHAR. Lateral flowers with six or eight stamina, the terminal one with ten.

SYN. Monotropa hypopithys. *Linn. Sp. Pl.* 555. *Huds. Fl. An.* 175. *With. Bot. Arr.* 424.

Hypopithys lutea. Raii Syn. 317.

BEECH and Fir woods in the midland counties of England produce this singular vegetable in abundance, flowering in June. Mr. Wagstaff communicated our present specimen, gathered by Mrs. Kett of Seething, in a pine grove at Stoke near Norwich, in which spot the Monotropa was discovered in 1782, and never before in that county.





ANDROMEDA polifolia.

Marsh Andromeda.

DECANDRIA Monogynia.

GEN. CHAR. *Cal.* 5-cleft. *Cor.* ovate; its orifice 5-cleft. *Caps.* superior, 5-celled; the partitions from the middle of the valves. *Antheræ* with 2 pores.

SPEC. CHAR. Flowers clustered, terminal. Leaves alternate, lanceolate, revolute, glaucous beneath.

SYN. *Andromeda polifolia.* *Linn. Sp. Pl.* 564. *Fl. Lapp. ed.* 2. 131. *t.* 1. *f.* 2. *Sm. Fl. Brit.* 441. *Hudf.* 176. *Witb.* 398. *Hull.* 91. *Dickf. H. Sicc. fasc.* 6. 4.

Ledum palustre nostras, Arbuti flore. *Raii Syn.* 472.

VARIOUS of our friends situated in the north have obligingly communicated to us wild specimens of this elegant little shrub, which grows on most peat bogs in the mountainous parts of England and Ireland, and lowlands of Scotland, intermingled with *Ericæ*, *Vaccinia*, &c. flowering in

June.



Andromeda virginica L.





[2377]

ARBUTUS Unedo.

*Strawberry-tree.**DECANDRIA Monogynia.*

GEN. CHAR. *Cal.* deeply 5-cleft. *Cor.* ovate; its orifice 5-cleft; its base transparent. *Berry* superior, 5-celled. *Anthers* with 2 pores.

SPEC. CHAR. Stem arboreous. Leaves smooth, bluntly serrated. Panicle terminal. Berry with many seeds.

SYN. *Arbutus* Unedo. *Linn. Sp. Pl.* 566. *Suppl.* 238. *Sm. Fl. Brit.* 442. *Huds.* 177. *With.* 399. *Hull. ed.* 2. 121. *Dicks. H. Sicc. fasc.* 13. 16. *Mill. Ic. t.* 48.

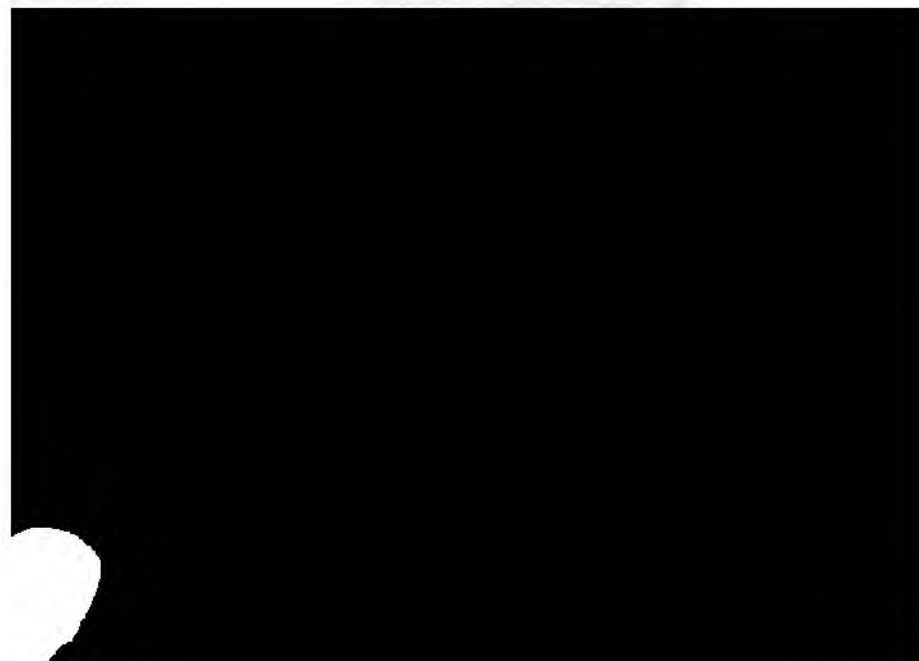
Arbutus. *Raii Syn.* 464. *Ger. em.* 1496.

LIMESTONE rocks, which make a part of the beautiful scenery about the lake of Killarney, in the west of Ireland, are copiously adorned with this beautiful tree, now completely naturalized; though some have suspected that it might have been brought by the monks, formerly settled there, from France or Italy. The place in which it grows is certainly so analogous to its stations in the south of France, and the climate so mild, that it may well be deemed indigenous. In our gardens, from whence this specimen was taken, the *Arbutus* is tolerably hardy, though the fruit is seldom seen much to the north of London. It ripens in autumn from the blossoms of the autumn preceding, but however tempting in appearance, its vapid flavour is such, that the Latins named it *Unedo*, as if nobody would wish to eat more than one.

This is a bushy tree, with a reddish bark, the young shoots often bright red, and rough with glandular hairs. Leaves alternate, stalked, elliptic-lanceolate, unequally and bluntly serrated, smooth, except the rib, shining, veiny, evergreen. Panicles drooping, composed of a few racemose branches, with an oblong bractea under each flower. The corolla is of a greenish semipellucid white, sometimes tinged with red, inodorous. Anthers pendulous, awned at the base. Fruit crimson, tuberculated all over, resembling a strawberry, but the seeds are internal.



Bot. 1812 published by J. L. L. L.





ARBUTUS alpina.

Black-berried Alpine Arbutus.

DECANDRIA Monogynia.

GEN. CHAR. *Cal.* deeply 5-cleft. *Cor.* ovate; its orifice 5-cleft; its base transparent. *Berry* superior, 5-celled. *Anthers* with 2 pores.

SPEC. CHAR. Stems procumbent. Leaves rugged, serrated.

SYN. *Arbutus alpina.* *Linn. Sp. Pl.* 566. *Sm. Fl. Brit.* 442. *Huds.* 177. *With.* 399. *Hull.* 91. *ed.* 2. 121. *Lightf.* 215. *t.* 11. *fig.* a, b. *Fl. Dan.* *t.* 73.

Vaccinia pannonica, sive *Vitis Idæa.* *Ger. em.* 1416.

WE are obliged to Mr. G. Don for this wild specimen, gathered near the head of Loch Traig, Perthshire, between two high mountains, in a valley covered with common Heath, but we have been obliged to have recourse to a dried one for the flowers, scarcely to be received fresh. Still we trust our figure will not be found incorrect. The berries, which are round and black, like black currants, resembling them also, it is said, in flavour, we have not been able to procure.

The woody trailing stems spread widely, clothed with deciduous bark. Leaves deciduous, alternate, obovate, serrated, rugged with reticulated veins, smooth, except a fringe at each side of their taper base. Flowers in short terminal clusters, white, ill-drawn by Lightfoot's artist from a dry specimen, and not well in the *Flora Danica*. Each flower-stalk has an elegant, concave, reddish, fringed bractea at its base.

We have already observed, in *v.* 10. *p.* 714, that Ray confounded the synonyms of this plant with those of *Arbutus Uva-ursi*, nor was Dillenius able to set him right.



Junonia, probably C. L. vert. L. n.



ARBUTUS Uva urfi.

Red trailing Arbutus.

DECANDRIA Monogynia.

GEN. CHAR. *Cal.* 5-cleft. *Cor.* ovate; its orifice 5-cleft; its base transparent. *Berry* superior, 5-celled. *Antheræ* with 2 pores.

SPEC. CHAR. Stems procumbent. Leaves entire.

SYN. *Arbutus Uva urfi.* *Linn. Sp. Pl.* 566. *Fl. Lapp. ed.* 2. 129. *t.* 6. *f.* 3. *Sm. Fl. Brit.* 443. *Hudsf.* 177. *With.* 399. *Hull.* 91. *Lightf.* 216. *t.* 11. *f.* c, d. *Woodv. Med. Bot.* *t.* 70.

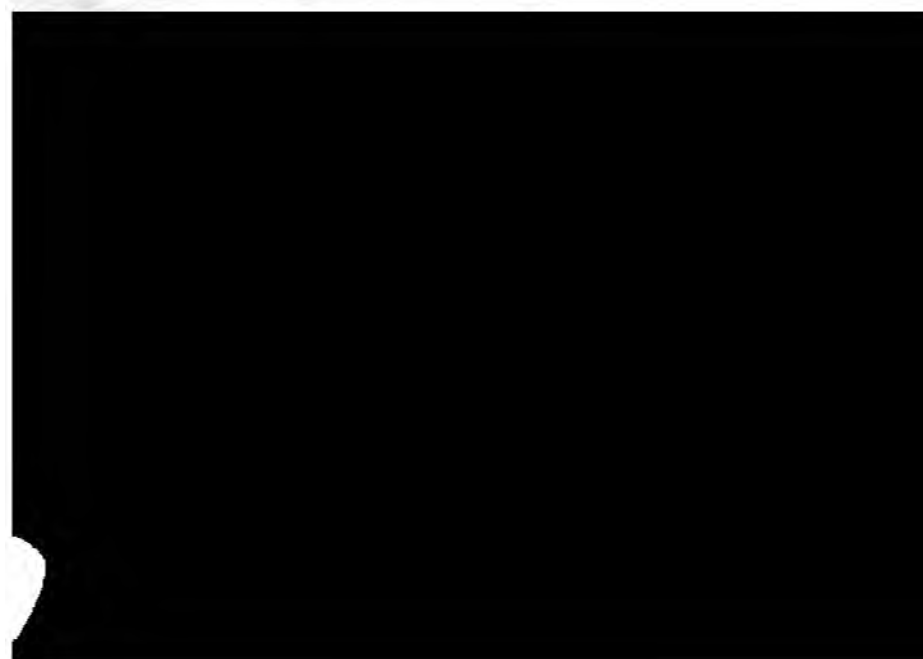
Vaccinia rubra, foliis myrtinis crispis. *Raii Syn.* 457.

A NATIVE of stony barren alpine heaths. We have received it from Durham by favour of the Rev. Mr. Harriman and Mr. Oliver. Ray saw it growing in Lancashire, but he and Dillenius confounded it with the synonyms of *A. alpina*, see the *Synopsis*, though Dr. Richardson's account there given is sufficient to ascertain it; and if any doubt remained, Mr. Lightfoot's finding this plant, not *A. alpina*, in the isle of

Mull, would remove every uncertainty. It flowers in June



Myrica carolinensis



PYROLA rotundifolia.

*Round-leaved Winter-green.**DECANDRIA Monogynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* 5-celled, bursting at the angles.

SPEC. CHAR. Stamina pointing upwards, style downwards.

SYN. *Pyrola rotundifolia.* *Linn. Sp. Pl.* 567. *Huds. Fl. An.* 175. *Witb. Bot. Arr.* 429.

Pyrola. *Raii Syn.* 363.

WE have already given the figures of two rare species of this pretty genus, and under the last (t. 158) promised as soon as possible to exhibit *P. rotundifolia*, which we are now enabled to do by means of a specimen gathered by the accurate and indefatigable Mr. Wigg, among bushes on a common at Bradwell not far from Yarmouth, where the plant grows sparingly, and is elsewhere, even among its favourite mountains of the north, very rarely to be found. It flowers mostly about July, and is perennial.

The root and leaves agree very much with those of *P. minor*, except that the latter, as well as the flowers, are larger. The calyx is longer, and more lanceolate, but the essential difference consists in the stamina being all bent, as if for shelter, towards the upper side of the flower, while the style (much longer than that of *P. minor*) is directed downwards in as singular a manner, as to catch the pollen. The



Nov 1 1794. Published by Roberts. London.





[1945]

PYROLA media.

Intermediate Winter-green.

DECANDRIA Monogynia.

GEN. CHAR. *Cal.* deeply five-cleft. *Pet.* 5. *Caps.* superior, of 5 cells, bursting at the angles. *Seeds* numerous. *Anthers* with 2 pores.

SPEC. CHAR. Stamens regularly inflexed. Style curved downwards. Cluster many-flowered, with a spiral stalk.

SYN. *Pyrola media.* Swartz in *Stockholm Trans.* for 1784. 263. t. 7. *Winch Guide*, v. 2. 19.

WE have the unexpected pleasure of adding another new *Pyrola* to the British Flora, by favour of its discoverer N. J. Winch, Esq., who sent us this specimen, which agrees with an authentic one from Dr. Swartz. It grows in shady places, and has been observed by Mr. Winch in Scots-wood Dean, 3 miles west of Newcastle; in East-common wood near Hexham, Northumberland; in some woods 4 miles north of Wolsingham, Durham; and at Studley, Yorkshire, flowering towards the end of June.

This species has been confounded with *P. minor*, t. 138, with which it nearly agrees in general habit, but differs in its very spirally twisted flower-stalk, and in the declination and much greater length of its style. The stamens are all regularly incurved round the germen as in *P. minor*, not directed upwards as in *P. rotundifolia*, t. 213, neither is the style so recurved as in the latter, nor the flowers so large. The leaves of all these species vary much in outline, as well as serratures. The roots are creeping and perennial.







PYROLA rosea.
Rose-coloured Winter-green.

DECANDRIA Monogynia.

GEN. CHAR. *Cal.* deeply five-cleft. *Pet.* 5. *Caps.* superior, of 5 cells, bursting at the angles. *Seeds* numerous. *Anthers* with 2 pores.

SPEC. CHAR. Stamens regularly inflexed. Style straight. Cluster of many drooping flowers. Stalk straight, quadrangular. Petals rounded, obtuse.

WE are obliged to James Backhouse, Esq. of Darlington for specimens and drawings of this *Pyrola*, found, flowering in July, in Hyndon gill, near Cockfield, Durham, and not uncommon in most similar situations in that county. Mr. Backhouse observes that "it differs from *media*, t. 1945, in having a straight style, only half the length of that species; a stem without any twist, dark brown, with four angles, one of which is nearly obsolete; flowers at least one fifth smaller, and of a light pink. The stigma is large, and five-lobed. From the figure of *P. minor*, t. 158, it differs in having drooping globular flowers, and the petals and leaves shaped as in *media*."

We confess our doubts whether this species has not been confounded, even by Linnaeus, with *P. minor*, nor have we perhaps escaped this error, into which the straight short style may have led botanists in general, without their examining further. Yet our t. 158, if the form of the petals and posture of the flowers be correct, cannot have been taken from the present species. For the exactness of the present figure we can vouch, and shall be obliged to any of our correspondents, who have access to the wild plants, to determine whether the real *minor* agrees with our t. 158, or whether it still remains unpublished by us. Our dried specimens have excited our scruples, but cannot remove them.



Fig. 1. 2. 3. published by J. B. Knapton



PYROLA minor.

Lesser Winter-green.

DECAENDRIA Monogynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Capsule* 5-celled, bursting at the angles.

SPEC. CHAR. Flowers in a racemus, scattered. Stamina spreading every way. Style straight.

SYN. *Pyrola minor.* *Linn. Sp. Pl.* 567. *Huds. Fl. An.* 176. *With. Bot. Arr.* 429. *Raii Syn.* 363.

SENT from Scotland along with *Pyrola uniflora* (t. 146) by James Brodie Esq. It is rather an alpine plant, occurring in mountainous forests, though even found in Stoken-church woods Oxfordshire. Dillenius well observes, that this is really more common than the *P. rotundifolia*, called by old authors *vulgaris*, and suspects they may often have been confounded, as they certainly were by Ray. Dr. Smith found them so in Mr. Lightfoot's herbarium, though so distinct in the form and position of their stamina and pistilla, as we hope to demonstrate when we can obtain a wild specimen of *P. rotundifolia*.

The plant now figured has a perennial branchy root, producing a few short, angular, leafy stems. The leaves are roundish, obtuse, obsolete ferrated, of a hard firm texture, smooth, on longish, angular, and often webbed, footstalks. The stalk is erect, about 6 inches high, triangular, smooth, terminating in a simple upright bunch of white or reddish flowers, standing on short footstalks, and pointing every way. The bractæ lanceolate, standing solitary at the base of each footstalk. Calyx small. Petals concave, veiny. Stamina spreading from their base, then erect. Antheræ roundish, with two holes at their lower part, but not, as in *P. uniflora*, protruded into tubes. Germen roundish, with five furrows. Style simple, short, erect, nearly on a level with the stamina. Stigma small, five-lobed.

This species, planted by Mr. Lightfoot, is in a manner naturalized in the Duke of Portland's fine wood at Bulstrode.







[517]

P Y R O L A secunda.

*Serrated Winter-green.**DECANDRIA Monogynia.*

GEN. CHAR. *Cal.* five-cleft. *Petals* five. *Caps.* five-celled, bursting at the angles.

SPEC. CHAR. Flowers all leaning one way.

SYN. *Pyrola secunda.* *Linn. Sp. Pl.* 567. *Huds.* 176.

With. 401. *Dicks. H. Sicc. fasc.* 5. 8.

P. folio mucronato serrato. *Raii Syn.* 363.

TO complete our history of the British *Pyrola*, as far as they are at present known, we have obtained wild specimens of the species now before us by the kind assistance of James Brodie, Esq. F.L.S., from the hill of Dunnairn in the Earl of Moray's forest of Darnway, in the neighbourhood of Brodie house. It is of very rare occurrence in this island, growing only under the shade of firs in the most alpine forests. Ray had it from Yorkshire. It is perennial, and flowers in July.

The roots are small and fibrous. Stems at first procumbent, creeping, slender, alternately branched, clothed with a few scattered lanceolate stipulæ; their extremities are angular, leafy







PYROLA uniflora.

*Single-flowered Winter-green.**DECANDRIA Monogynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Capsule* 5-celled, bursting at the angles.

SPEC. CHAR. Stalk bearing a solitary flower.

SYN. *Pyrola uniflora.* *Linn. Sp. Pl.* 568. *Fl. Dan.* t. 8. very incorrect.

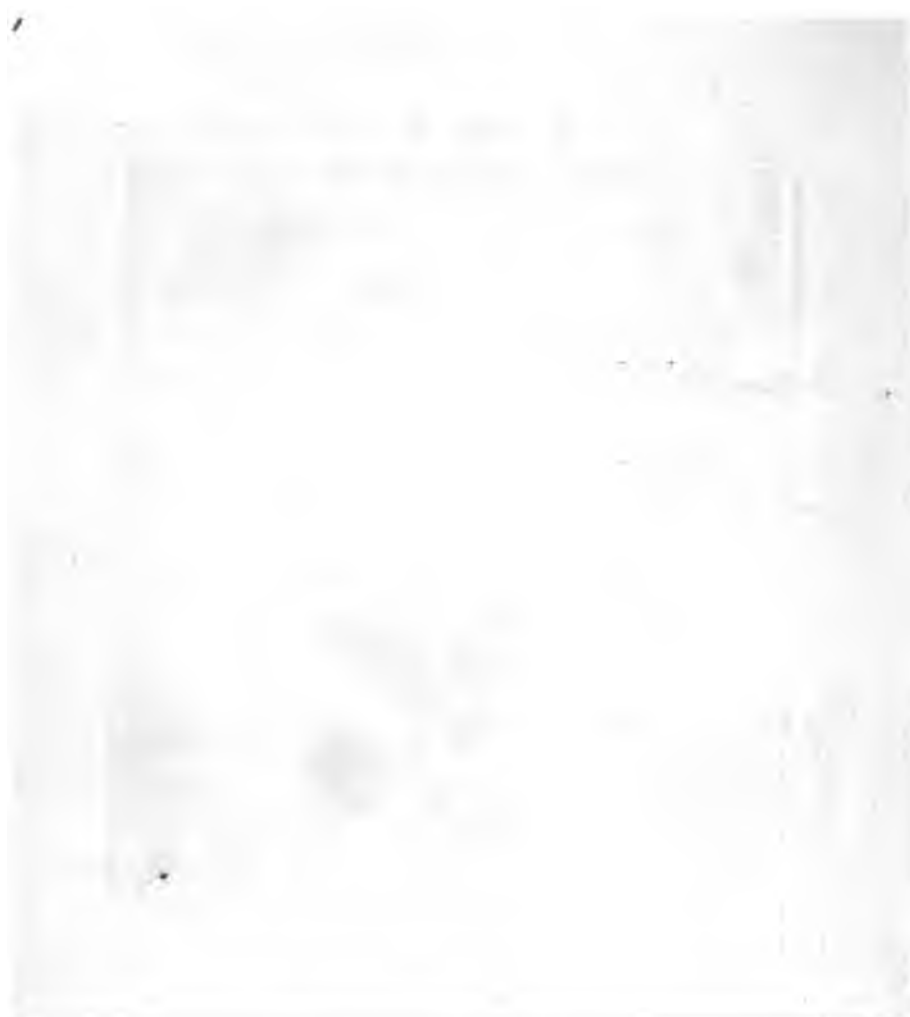
P. scapo unifloro. *Hall. Hist.* 1011.

P. quarta minima Clusii. *Ger. em.* 408.

HAVING in the preceding page determined an obscure plant, we hope in this to afford the British botanist no less pleasure in presenting him with a new one. *Pyrola uniflora*, though a native of the Lapland, Norway, German and Swiss alps, was never supposed to grow in our island till James Brodie Esq. of Brodie-house in Scotland found it in that neighbourhood last summer, when also Mr. James Hoy F. L. S. sent it to the Linnaean Society from near Gordon Castle. Both these gentlemen we believe are equally entitled to the honour of its discovery; to the former we are indebted for recent wild specimens.

This *Pyrola* is found in moist alpine woods; its long branched perennial roots run deep among the moss, which in such places is watered by numerous little rills. Every part is smooth. The stem short, simple, angular, set with a few alternate concave scales, and bearing several roundish, more or less obtuse, serrated, veiny, petiolate leaves. Stalk terminal, erect, much longer than the stem, angular, bearing seldom more than one concave bractea, with a solitary flower of great elegance, compared by Clusius to that of the *Parnassia* (t. 82), and possessing all the fragrance of Lily of the valley. This flower is in perfection about July. Its corolla is sometimes streaked externally with red, as is the calyx. Linnæus and Haller have well observed that the stamina are not placed regularly with respect to the petals, some of the latter having 3 stamina next them, others 2, and others but 1. The antheræ are of a most curious figure, 4-lobed, with two tubes at the base by which probably the pollen is discharged. The stigma resembles a 5-rayed crown.







CHRYSOSPENIUM alternifolium.

Alternate-leaved Golden Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Calyx* four or five-cleft, coloured. *Corolla* none. *Capfule* with two beaks, one cell, and many feeds.

SPEC. CHAR. Leaves alternate.


SYN. Chryfopfenium alternifolium. *Linn. Sp. Pl.* 569.
Hudf. Fl. An. 179. *With. Bot. Arr.* 404.

Saxifraga aurea foliis pediculis oblongis infidentibus.

Raii Syn. 158.

THE favourite fituation of this plant is a black boggy foil on the margins of little rills in wet shady woods, where it is, though rarely, found, intermixed generally with the more common fpecies of Chryfopfenium, which has oppofite leaves. Both are conspicuous for their yellow hue, which difcovers them at a diftance. They flower early in May, and are perennial.

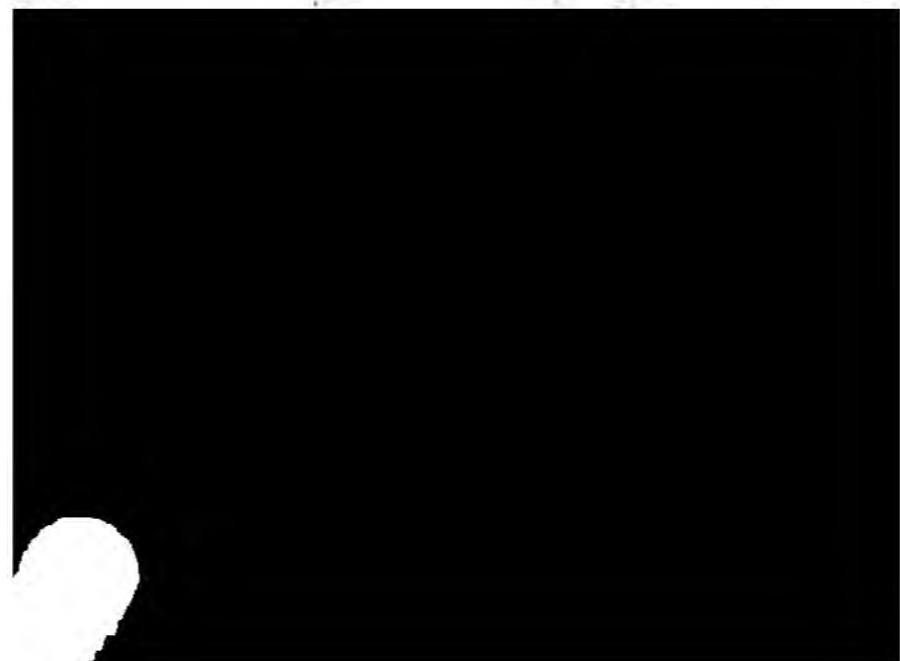
This fpecies is the more ftriking of the two, being rather





8





CHRYSOSPLENIUM oppositifolium.

Opposite-leaved Golden Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 4 or 5 cleft, coloured. *Cor.* none.
Capsule with 2 beaks, 1 cell, and many seeds.

SPEC. CHAR. Leaves opposite.

SYN. *Chryso-splenium oppositifolium.* *Linm. Sp. Pl.*
 569. *Huds.* 178. *With.* 402. *Sibth.* 137. *Curt.*
Lond. fasc. 2. t. 27.

Saxifraga aurea. *Raii Syn.* 158.

IN our first volume, t. 54, the other more rare species of this pretty genus is figured and described. In that the leaves are alternate, herb and flowers more deeply coloured and more striking in appearance. Notwithstanding the doubts of Linnaeus they seem unquestionably distinct, and the different situations of the leaves afford an elegant and decisive mark of distinction.

Chryso-splenium oppositifolium grows like the former about the margins of clear springs under the shade of trees or rocks, forming broad patches of a pale yellowish green hue. Root perennial, of simple fibres springing from the joints of the procumbent part of the stem. Leaves all opposite, on footstalks, inclining to heart-shaped, crenate, succulent, clothed with a few hairs. Flowers in a terminal leafy corymbus, pale yellow, mostly four-cleft. Their notched glandular ring, which surrounds the base of the germen, is inserted between that part and the stamina, and is therefore (as Mr. Curtis remarks) probably a nectary, or at least it cannot be called a receptacle. The seeds are numerous, round and blackish.







SAXIFRAGA stellaris.

Hairy Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Capf.* with two beaks, one-celled; *seeds* numerous.

SPEC. CHAR. Leaves serrated. Stem naked, branching. Petals pointed.

SYN. *Saxifraga stellaris.* *Lin. Sp. Pl.* 572. *Huds. Fl. An.* 179. *With. Bot. Arr.* 430.

Geum palustre minus, foliis oblongis crenatis.
Raii Syn. 354.

THE elegant genus of *Saxifraga* is almost entirely alpine, and most of its species can bear a considerable degree of cold, provided they enjoy a pure air. This now before us grows plentifully in Wales, Scotland, and the northern parts of England, especially Westmoreland. Dr. Woodville favoured us with fresh wild specimens gathered last summer on Skiddaw. Its favourite station is in the black turfy margins of rills on the



1794



SAXIFRAGA nivalis.

Clustered Alpine Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Capsf.* with two beaks, one-ceiled. *Seeds* numerous.

SPEC. CHAR. Leaves obovate, serrated. Stem simple, naked. Flowers clustered.

SYN. *Saxifraga nivalis.* *Lin. Sp. Pl.* 573. *Huds.* 180. *With.* 403. *Lightf.* 221, *tab.* 12.

S. foliis oblongo-rotundis dentatis, floribus compactis.
Raii Syn. 354, *tab.* 16. *f.* 1.

THIS, the most alpine of our British saxifrages, is found about the summits of the highest mountains only, in Scotland and Wales, where it flowers throughout the short summer of those exalted regions, but most naturally and plentifully in August. Dr. Smith found it sparingly, in 1782, under the shade of a rock to the west, among some large dispersed masses of white quartz on the top of Ben Lomond. We have been favoured with wild fresh specimens from Wales last summer (along with many other rare plants) by I. W. Griffith, Esq. F. L. S. of Garn near Denbigh, whose remarks on its extreme variableness, as to size, shape of the leaves, luxuriance of its flowering stem, and number of flowers, may be seen in Dr.



Androsace hypoleuca (L.) Link.



SAXIFRAGA umbrosa.

London Pride, or None-so-pretty.

DECANDRIA Digynia.


GEN. CHAR. *Cal.* five-cleft. *Petals* five. *Capsf.* with two beaks, one cell, and many *seeds*.

SPEC. CHAR. Leaves obovate, bluntish, with a cartilaginous notched margin. Stem naked, panicled. Capsule superior.

SYN. *Saxifraga umbrosa.* *Linn. Sp. Pl.* 574. *Sm. Fl. Brit.* 450. *With.* 403. *Hull.* 92.

Geum folio subrotundo minori, pistillo floris rubro.
Magnol. Hort. 88. *t.* 14. (majori) *Mill. Ic. t.* 141.
f. 2. *Dill. in Ruis Syn.* 355.

IT is singular that this plant should have been omitted by Mr. Hudson. The authorities mentioned by Dillenius for its growing on several mountains in Ireland are indubitable; and to them may be added that of Mr. Lambert, who gathered this Saxifrage on Croagh Patrick in the County of Mayo, a conical hill observed by Mr. Kirwan to rise 2666 feet above the neighbouring ocean. Sir T. Frankland and Dr. White have gathered it in Thorp Arch woods, Yorkshire. Our spe-





Androsace poliflora (L.) Rostk. Schmidt





SAXIFRAGA *hirsuta*,
Hairy Oval-leaved Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with 2
 beaks, 1 cell, and many seeds.

SPEC. CHAR. Leaves oval, somewhat heartshaped, abrupt, with cartilaginous notches, Stem naked, panicled. Capsule superior.

SYN. *Saxifraga hirsuta*. *Linn. Sp. Pl.* 574. *Picot Lapeyrouse Pyren. t.* 23.

IN our 22d volume, p. 1561, we have announced the discovery of this plant on the Irish mountains by Mr. J. T. Mackay, and we are obliged to that assiduous botanist for a specimen produced last June, in the Dublin garden, from a native root.

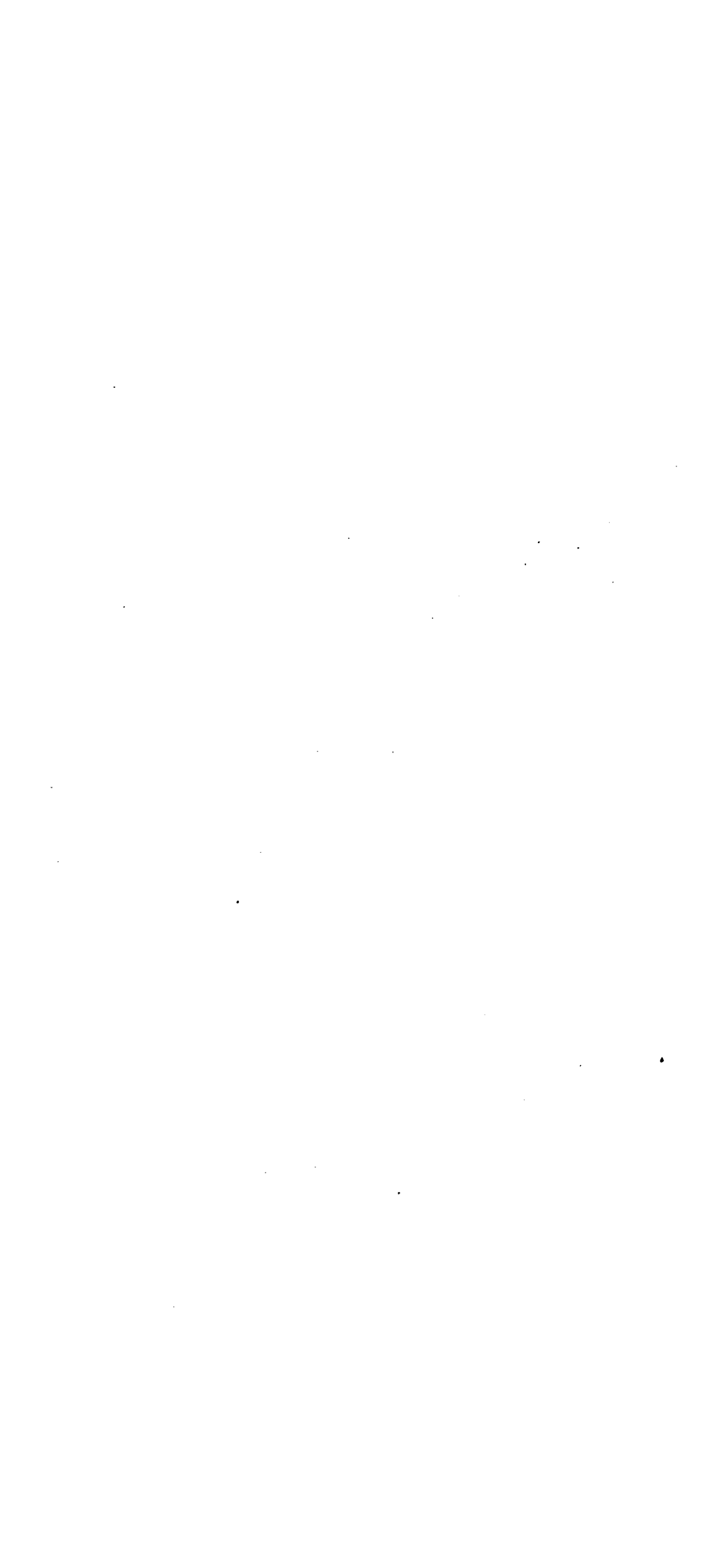
This species is very near *S. Geum*, t. 1561, but Mr. Mackay, who has observed it both in a wild and cultivated state, is satisfied of their being distinct. All we can vouch for is its being what Linnæus described as *hirsuta*. The synonym of *Geum folio circinato, acutè crenato, pistillo floris rubro*, Magnol. Hort. 87. t. 13, appears by the figure rather to belong to *S. Geum*. Linnæus justly points out the affinity of these two plants, but says the leaves of the present are oval, not kidney-shaped, which is true, and appears to be constant. The flowers are rather larger and more ornamental, having more red spots on their petals, but this may be variable. *S. hirsuta* seems an intermediate species between *Geum* and *umbrosa*, t. 663,

2322.



Fig. 1. 1850. published by J. C. Harvey, London.





SAXIFRAGA Geum.
Kidney-leaved Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with 2 beaks, 1 cell, and many seeds.

SPEC. CHAR. Leaves of a rounded kidney-shape, sharply toothed. Stem naked, paniced. Capsule superior.

SYN. *Saxifraga Geum.* *Linn. Sp. Pl.* 574.

Sedum montanum rotundifolium minus album non guttatum. *Moris. Hist.* v. 3. 478—no figure.

Sanicula montana minor. *Clus. Pann.* 441.

DISCOVERED by Mr. J. T. Mackay on a mountain near Dingle in the county of Kerry, Ireland, in September 1804. Roots brought from thence flowered the following June, and we are obliged to that gentleman and to Dr. Scott for specimens. The *Saxifraga umbrosa*, v. 10. t. 663, was long supposed a doubtful native of Ireland, nor had any one suspected that the *S. Geum* and *hirsuta* grew there too; yet Mr. Mackay has found these, and what may possibly prove another species. We hope in due time to elucidate them all, but at present must content ourselves with giving what is the real *S. Geum* of Linnaeus, of which the above are conceived to be certain synonyms.

This differs from *S. umbrosa* in having rounded, somewhat kidney-shaped, hairy leaves, sharply toothed, by no means elongated at the base into a flat footstalk, but standing each on a longish, narrow, hairy footstalk. The flowerstalk is paniced, and clothed with red, glandular hairs. Petals cream-coloured, not sprinkled with yellow and red spots, but merely marked at the base with a purple line and yellow stain. The germen is superior, and calyx reflexed.



SAXIFRAGA oppositifolia.

Purple Saxifrage.

DECANDRIA Digynia.


GEN. CHAR. *Cal.* in five segments. *Cor.* of five petals. *Capsule* with two beaks, one-celled ; *seeds* numerous.

SPEC. CHAR. Leaves opposite, imbricated all along the stem, the upper ones ciliated. Flowers solitary, terminal.

SYN. *Saxifraga oppositifolia.* *Linn. Sp. Pl.* 575. *Huds. Fl. An.* 180. *Witb. Bot. Arr.* 432. *Fl. Dan. t.* 34.

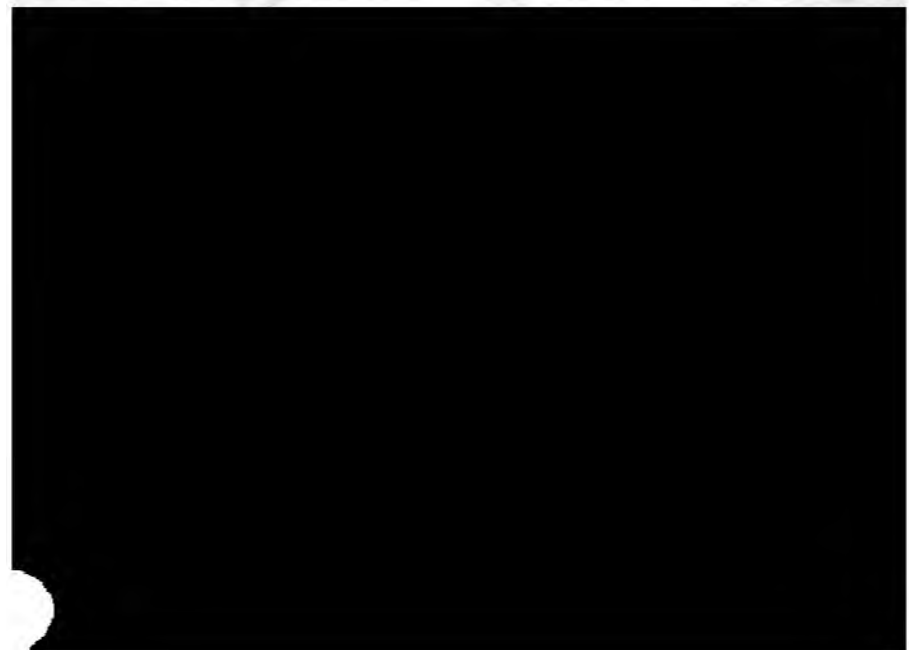
S. Alpina ericoides, flore cæruleo. *Raii Syn.* 353.

A NATIVE of the highest alpine rocks, especially of Snowdon and Ingleborough, where it is "doomed to blush (for the most part) unseen" on the first melting of the snow. In the latter part of summer the plant acquires a dark mahogany





Veronica *sp.*



SAXIFRAGA Hirculus.

Yellow Marsh Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with 2 beaks, 1 cell, and many *seeds*.

SPEC. CHAR. Stem-leaves lanceolate, alternate, entire. Stem erect. Germen ovate, superior.

SYN. *Saxifraga Hirculus.* *Linn. Sp. Pl.* 576. *Sm. Fl. Brit.* 451. *Huds.* 181. *With.* 404. *Hull.* 93. *Curt. Lond. fasc.* 6. t. 26. *Fl. Dan.* t. 200.

Geum angustifolium autumnale, flore luteo guttato. *Dill. in Raii Syn.* 355.

THE genus of *Saxifraga* is on the whole one of the most elegant we have in Europe, and the species before us one of the most rare. It was shown to Dr. Richardson by Dr. Kingstone, growing plentifully on Knutsford moor, Cheshire, early in the last century, and our wild specimens were gathered last summer in a morass about the centre of the same moor by Mr. Okell of Chester. It is perennial, flowering in August, and may be cultivated in a moist border of bog earth.



11. 2. 2. 1872. Published by G. L. G. G. G. G.



SAXIFRAGA aizoides.

Yellow Mountain Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* in five divisions. *Cor.* of five petals.*Capsule* with two beaks, one cell, and many seeds.

SPEC. CHAR. Stem-leaves linear, scattered, generally edged with tooth-like cilia: radical ones aggregate. Stem decumbent.

SYN. *Saxifraga aizoides.* Linn. *Sp. Pl.* 576. Hudf. *Fl. An. ed.* 1. 158.*S. autumnalis.* Hudf. *Fl. An. ed.* 2. 180. Lightf. *Fl. Scot.* 222. Wiltb. *Bot. Arr.* 433.*S. alpina angustifolia, flore luteo guttato.* Raii *Syn.* 353.

A NATIVE of alpine rills and moist rocks in a black boggy soil; in Scotland and the north of England very plentiful, flowering from June till the end of autumn. The roots creep very far: the stems are almost prostrate in their lower part, and thickly covered with leaves; their flowering extremities grow erect, and the leaves on them are much more scattered, as well as larger. The leaves are edged with such strong and remote cilia, that they might almost be called dentated: these cilia are, nevertheless, sometimes wanting, whence Linnæus describes his *S. aizoides* as having naked, and not ciliated leaves. Even his own specimen however (which is certainly the same species as ours) has traces of them; and, in fact, the number and density of these cilia are very variable. The flowers, which are terminal, and often form a kind of small corymbus, are extremely beautiful when closely examined; those that appear earliest are most deeply coloured.

Haller and Jacquin, and after them Lightfoot, suppose the Linnæan *S. autumnalis* not specifically distinct from this plant; and Linnæus himself has thought the hint worth noticing in his *Mantissa* ii. p. 383. Unluckily, his own Herbarium has no specimen to shew what he intended by *S. autumnalis*; and it appears he took up the plant from other authors. However this may be, the synonyms of Breynius and Morison quoted in *Sp. Pl.* certainly belong to *S. Hirculus*, and the rest probably to our plant. Dr. Stokes's conjecture (*Bot. Arr.* 434) is perhaps nearest the truth, that Linnæus's *S. autumnalis* is a ciliated variety of *S. Hirculus*.

We have endeavoured to make a new specific character, tolerably applicable to the plant. We prefer the name of *aizoides*, because it is undoubtedly right, as well as expressive; whereas that of *autumnalis* is not only, as above said, uncertain, but improper for a plant that flowers during most part of the summer.



Helianthus divaricatus L.





SAXIFRAGA granulata.

White Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with two beaks, one cell, and many seeds.

SPEC. CHAR. Stem-leaves kidney-shaped, lobed. Stem branched. Root granulated.

SYN. *Saxifraga-granulata.* *Linn. Sp. Pl.* 576. *Huds.* 182. *With.* 405. *Relh.* 166. *Sibth.* 137. *Curt. Lond. fasc.* 1. t. 30. *Dicks. H. Sicc. fasc.* 5. 5. *S. rotundifolia alba.* *Raii Syn.* 354.

THIS pretty Saxifrage, rendered conspicuous by its brilliant white blossoms in the month of May, grows in dry pastures and on banks, where the soil is gravelly, but not very frequently, though where it does occur it is always in plenty. About Norwich it is far from rare; near London it is less common.

Root perennial, of several little grains or knobs, attached to one main fibre, and throwing out small fibres from their base. Stem solitary, erect, branched and panicled above, leafy, round, clothed with viscid hairs, and of a brown or reddish hue, with which colour the leaves and calyx-teeth are also tinged, giving the whole herb a rich and glowing appearance: these parts are also clothed with the same kind of hairs, especially the calyx, which is very clammy to the touch. The leaves are palmate and notched, somewhat fleshy, the radical ones on long foot-stalks. Petals obovate, much longer than the calyx, marked with three branched veins. Stamina all nearly equal. Germs inferior. Stigmas blunt and downy.—It is frequently cultivated with double flowers.

This plant has been recommended in the stone and gravel, because its granulated roots resemble small pebbles; but not being within the reach of every bungling apothecary or village doctress, its place has been capriciously supplied by the *Pimpinella*, t. 407, with which it has scarcely any character or property in common.





SAXIFRAGA cernua.
Drooping Bulbous Saxifrage.

DECANDRIA Digynia.

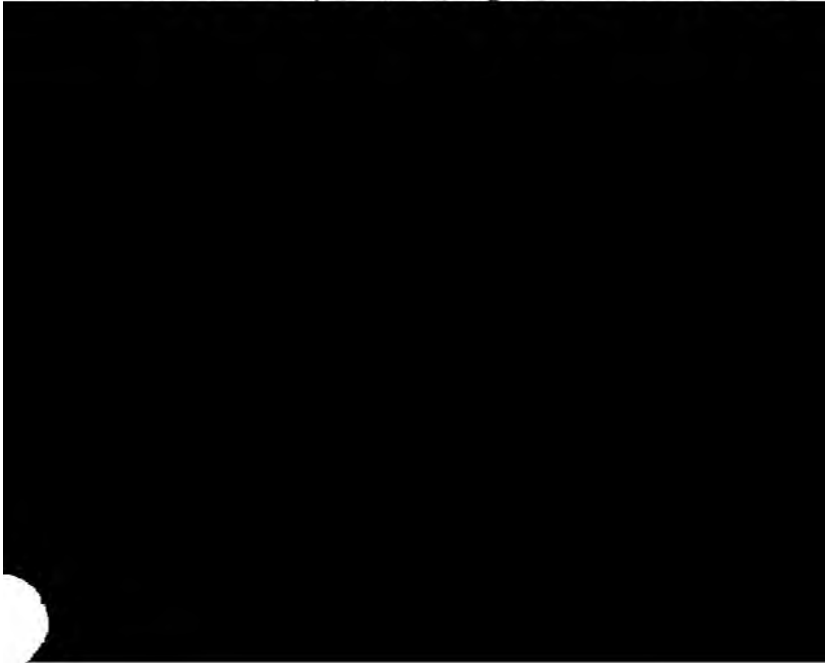
GEN. CHAR. *Cal.* five-cleft. *Petals* 5. *Capsf.* with two beaks, one cell, and many *seeds*.

SPEC. CHAR. Leaves on footstalks, palmate. Stem bearing bulbs. Germen superior. Petals blunt.

SYN. *Saxifraga cernua*. *Linn. Sp. Pl.* 577. *Fl. Lapp.* t. 2. f. 4. *Sm. Fl. Brit.* 453. *Dicks. Tr. of Linn. Soc.* v. 2. 290. *Willd.* 405. *Hull.* 93.

MR. DICKSON first detected this rare alpine plant on the summit of Ben Lawers. The impossibility of procuring fresh specimens from thence, has made us thankfully accept this from the garden of the Rev. Mr. Bale, F. L. S. at Withyam, Suffex. Though a cultivated one, it exhibits the true wild appearance, and agrees precisely with those from Scotland and Lapland. It is perennial, and flowers in July or August.

Root a small scaly bulb, throwing out branched black fibres.

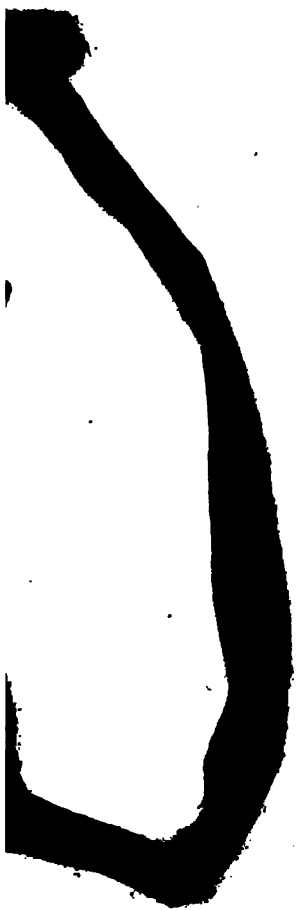


664



Scilla 1999 *Scilla* by *Scilla* *Scilla*.





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SAXIFRAGA rivularis.

Alpine Brook Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with 2 beaks, 1 cell, and many seeds.

SPEC. CHAR. Leaves palmate, stalked; the uppermost spatulate. Stem few-flowered. Root fibrous. Germen half inferior.

SYN. *Saxifraga rivularis.* *Linn. Sp. Pl.* 577. *Fl. Lapp.* n. 174. t. 2. f. 7. *ed.* 2. 142. *Sm. Fl. Brit.* 454. *Fl. Dan. t.* 118.

A RARE inhabitant of alpine rills in the Highlands of Scotland, specimens of which were communicated to Mr. Sowerby by Mr. G. Don. It is perennial, flowering in June or July.

The root is fibrous and somewhat creeping. Stems decumbent at the base, two or three inches high, scarcely branched but at the bottom, bearing from two to five flowers, on stalks that are slightly downy and viscid. Lower leaves on long stalks, smooth and fleshy, palmate, in three or five rounded lobes, of which the middle one is the largest; one or two ovate or spatulate undivided leaves accompany the flowers. The petals are white, single-ribbed, rounded, not much exceeding the calyx, which is half inferior, surrounding the middle of the capsule.



May 1882. Middlebury College. June 1882. London



SAXIFRAGA tridactylites.

*Rue-leaved Saxifrage.**DECANDRIA Digynia.*

GEN. CHAR. *Cal.* five-cleft. *Petals* five. *Caps.* with two beaks, one cell, and many seeds.

SPEC. CHAR. Stem-leaves wedge-shaped, three- or five-cleft, alternate; the uppermost undivided. Stem erect, paniced.

SYN. *Saxifraga tridactylites.* Linn. *Sp. Pl.* 578. Huds. 182. *With.* 406. *Relh.* 166. *Sibth.* 138. *Curt. Lond. fasc. 2. t.* 406. *Dicks. H. Sicc. fasc. 8.* 10. *Lightf.* 224.

S. verna annua humilior. *Raii Syn.* 354.

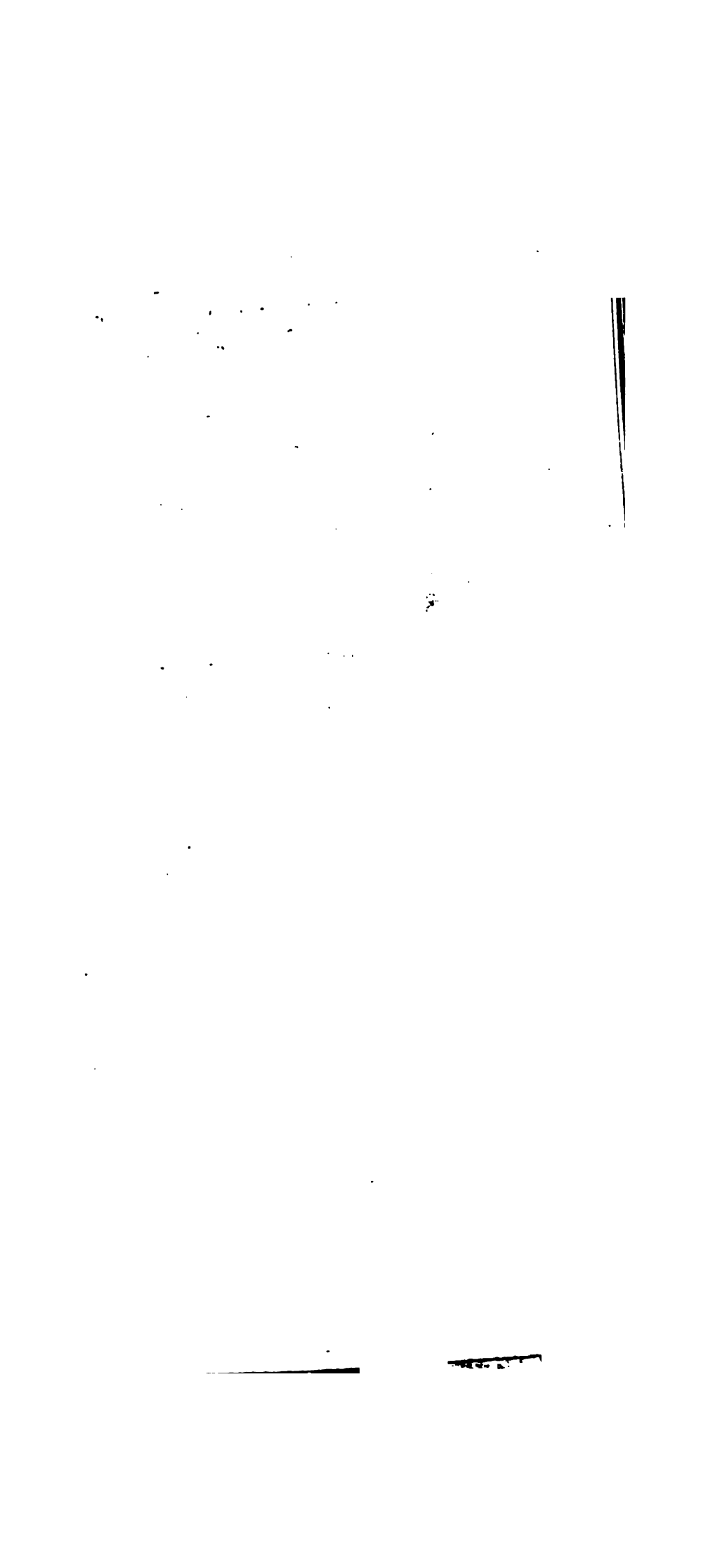
COMMON in most parts of England on walls, thatched roofs, and dry barren places, but rare in Scotland; it succeeds the *Draba verna* in the same situations, flowering in May, after which it becomes sunburnt, of a blood red or mahogany colour, soon sheds its seed, and withers away. When it happens to grow in shady places, it is greener, more slender, and longer lived.

Root annual, small, and entirely fibrous. Stem various in height and luxuriance, erect, round, leafy, a little zigzag, much branched above in a paniced manner. The whole herb is clothed with projecting viscid hairs. Leaves palmate in three segments, or pedate in five, tapering down into a wedge-shaped base, their margin entire, their substance tumid and fleshy; the uppermost of all are lanceolate and undivided. Flowers small, white, on upright solitary flower-stalks. Calyx urn-shaped, with small teeth. Petals obovate, scarcely exceeding the calyx. Styles greatly divaricated.

Some have taken this for the *Paronychia* of Dioscorides; but if the point were worth the pains of an examination, there are many plants that agree better with his short and lame account. His *Paronychia* was used to cure whitlows. Hence this saxifrage has been called whitlow-grass, a name more commonly given to *Draba verna*.







SAXIFRAGA cæspitosa.

Tufted Alpine Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Capsf.* with 2 beaks, 1 cell, and many seeds.

SPEC. CHAR. Radical leaves clustered, fleshy, linear, undivided or three-cleft, ribbed beneath. Stem almost naked, bearing one or two flowers.

SYN. *Saxifraga cæspitosa*. *Linn. Sp. Pl.* 578. *Sm. Fl. Brit.* 455.

FOR this plant also we are obliged to Mr. Griffith, who discovered it on the rocks about Cwm Idwel growing very sparingly, flowering in June. It affords us a fortunate opportunity of exhibiting, and fixing as a British species, the certain plant of Linnæus; for, if Dr. Withering be right, the *S. cæspitosa* of Hudson is no other than Jacquin's *moschata*, to which perhaps all the synonyms, applied in *Sp. Pl.* to the true *cæspitosa*, really belong. Even the figure of Scopoli, the only one I ventured to quote in the *Fl. Britannica*, I am now satisfied is rightly referred by Jacquin to his *muscoides*.

The true *S. cæspitosa*, of which the Linnæan herbarium contains abundant specimens, has a perennial root, crowned with dense tufts of fleshy linear blunt leaves, each with a triple nerve beneath; of which the lowermost are undivided, the rest three-cleft, sometimes five-cleft. Stem about two inches high, erect, bearing a few linear (rarely three-cleft) bractæ, and terminated by one or two large cream-coloured flowers. Calyx hemispherical, clothed like the herbage with prominent, glandular, not woolly, hairs, but its teeth are smoother and blunt. Petals obovate, entire, blunt, with a triple nerve. Germen almost entirely inferior.

It is much to be wished that some accurate botanist would ascertain whether it be this species, the *moschata*, or the *muscoides*, that grows about Ambleside.



St. John's Wort by J. A. Sowerby, London.

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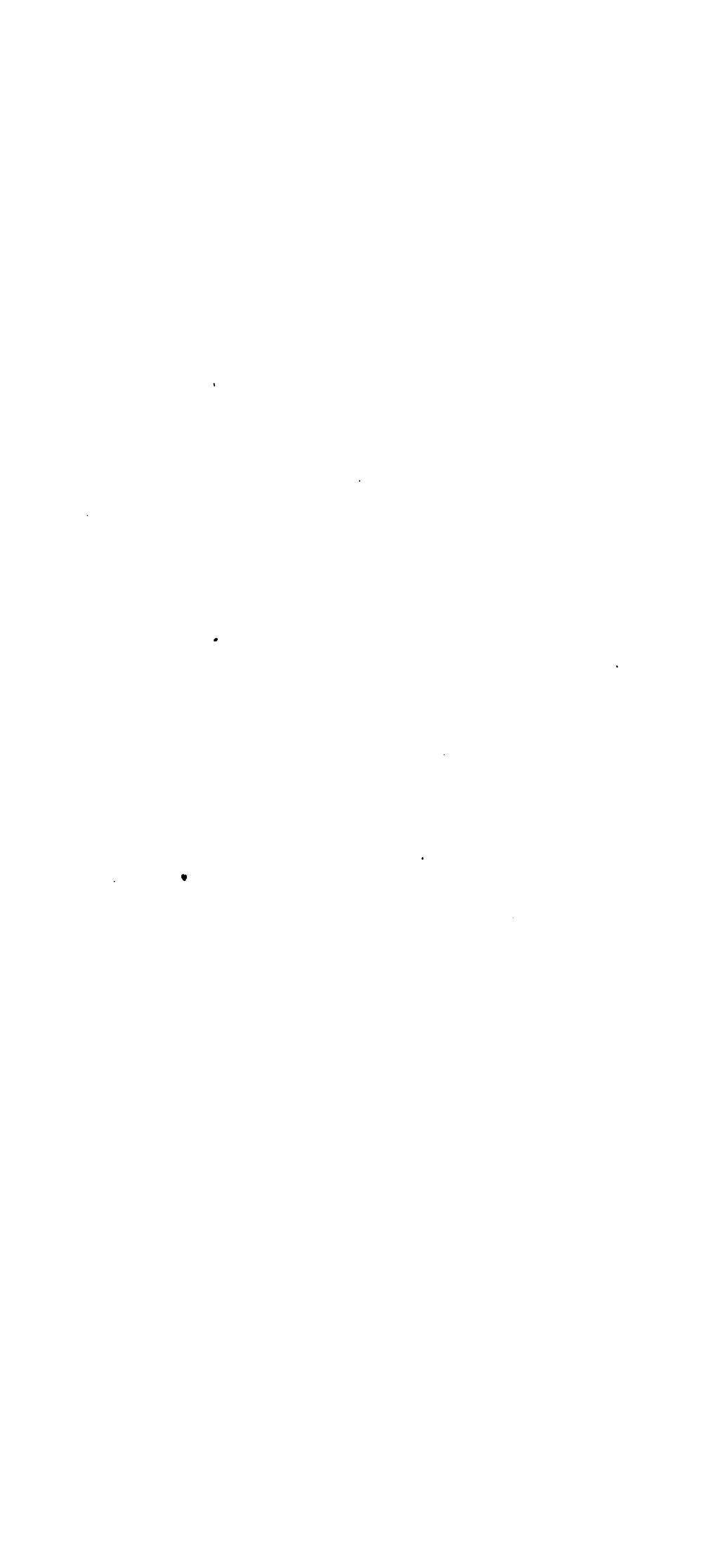
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SAXIFRAGA moschata.

Musky Alpine Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with 2 beaks, 1 cell, and many seeds.

SPEC. CHAR. Radical leaves aggregate, thin, linear-lanceolate, undivided or three-cleft, triple-ribbed. Stem nearly naked, with very few flowers.

SYN. *Saxifraga moschata.* *Murray in Linn. Syst. Veg. ed. 14.* 414. *Sm. Fl. Brit.* 455. *Hull. ed. 2.* 124. *With.* 406.

S. caespitosa. *Huds.* 181?

S. n. 985. *Hall. Hist. v. 1.* 421.

WHETHER the plant found by Hudson on mountains above Ambleside, Westmoreland, (which spot we have examined in vain,) be the *moschata*, as Withering supposed, or not, we are now authorized in admitting this curious species as a British native, Mr. Don of Cambridge having given us specimens from his garden, the parent roots of which he received from the Highlands of Scotland. Jacquin's figure, *Misc. v. 2. t. 21. f. 1*, is so bad, that we decline quoting it, rather supposing it to represent one of several exotic species known to us, but hitherto not well explained in books. Neither is Haller's plate, *It. Helvet. t. 1*, very good.

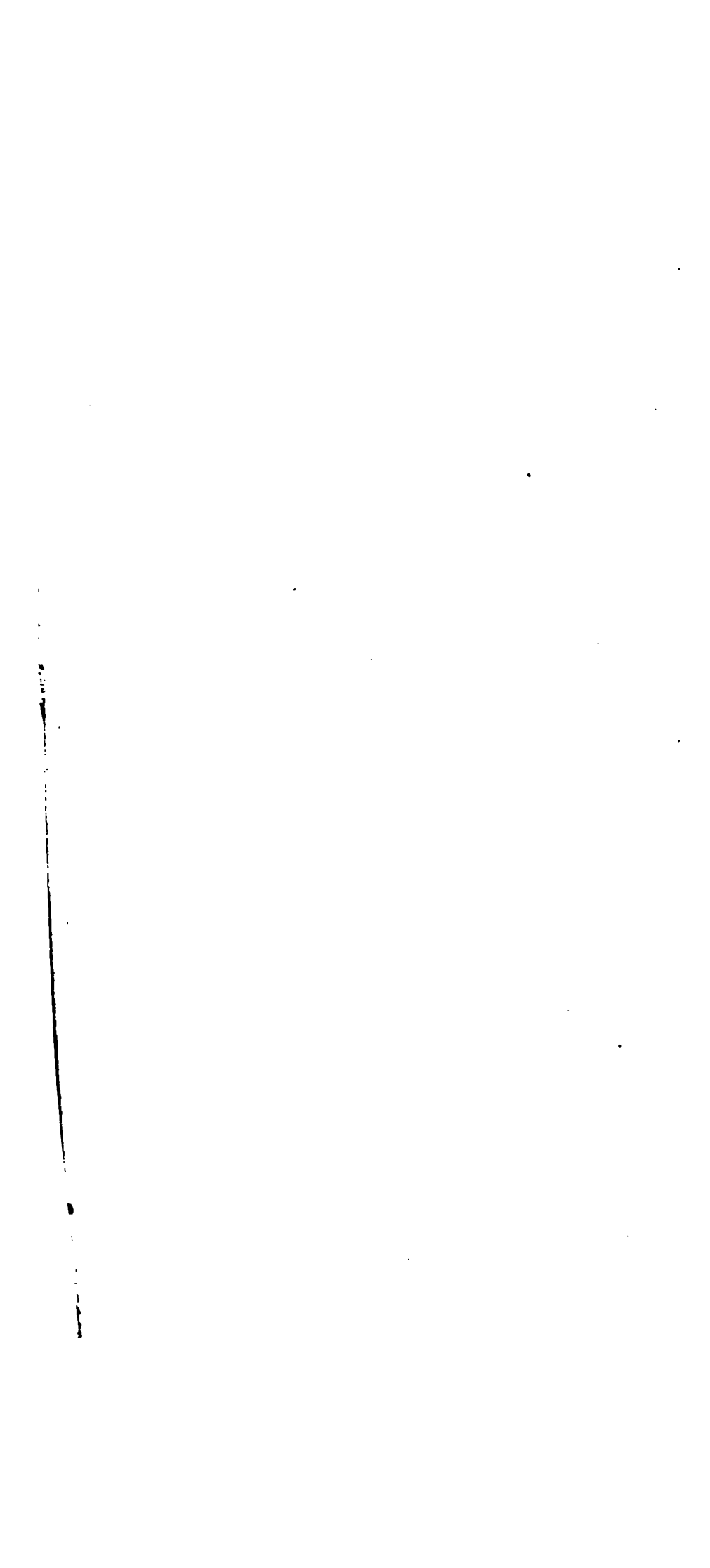
This little species forms perennial tufts, and flowers in May or June. The whole herb is glutinous, and has an aromatic musky smell in warm weather. The leaves are much thinner than those of *S. caespitosa*, *t. 794*, generally undivided, a few of them sometimes three-cleft; the main rib of each sending off, beyond its middle, two lateral ribs. The stems are about two inches high, bearing but few leaves, and from two to five flowers, whose germen is inferior, and whose petals, stamens, and styles are buff-coloured, with a reddish tinge. The petals are nearly obovate, three-ribbed above their base,

2314



Long. 1899. Published by J. J. L. L. L. L. L.





SAXIFRAGA palmata.
Palmate Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Capsf.* with 2 beaks, 1-celled. *Seeds* numerous.

SPEC. CHAR. Leaves hairy, palmate: the lower ones in five divisions; upper in three. Shoots ascending. Stem erect, leafy, with a dense panicle of few flowers. *Petals* roundish.

SYN. *Saxifraga petraea*. *With.* 890.

S. caespitosa. *Fl. Dan.* t. 71.

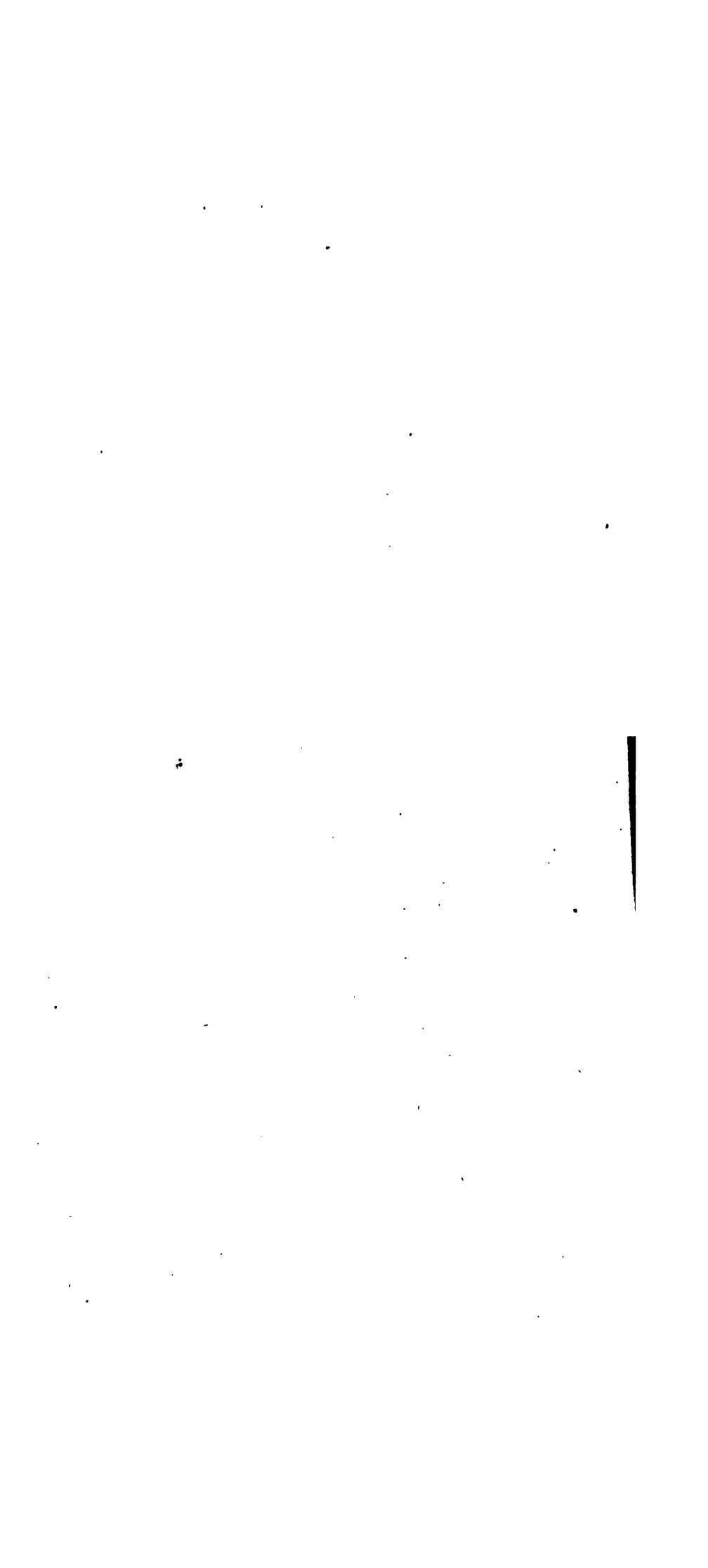
GATHERED wild on the rocks of Cwm Idwell, North Wales, by Mr. Griffith in the end of May last. The same gentleman also communicated specimens to Dr. Withering, who has inserted this plant at the end of his 3d volume by the name of *S. petraea* of Linnæus and Gouan; a mistake scarcely to be avoided, considering the confusion which envelops the *S. petraea*, and which we could never have removed without the original specimens of Linnæus, Gouan, and Seguiet now before us. From them it appears that the true *petraea*, figured by Pona, and sent by Seguiet to Linnæus, who first rightly described it in the 10th edition of *Systema Naturæ*, and then in *Sp. Pl.* ed. 2, is widely different, both from our plant and the variety β of *S. tridactylites* in *Flor. Suec.* It is no less different from Gouan's *petraea*, notwithstanding what he says about comparing it with Seguiet's specimens at Nismes; for his is actually *S. adscendens* of Linnæus. We have not room here to illustrate this matter as it deserves. We cannot refer our *palmata* to any species described in Haller, Allioni, Scopoli or Villars, though it comes in some points near the *exarata* of the latter. We have little doubt in quoting the *Flora Danica*, from the figure only; for, as usual, there is not much to be learned from the letter-press of that work. This figure has no resemblance to *S. caespitosa* of Linnæus.

S. palmata has a perennial root, and grows in tufts, composed of numerous radical leaves, from whose centre arises a simple erect flowering-stem, surrounded at the base with several nearly upright, shortish, leafy shoots or branches. All the leaves are palmate, lengthened out at their base, clothed with long white woolly scattered hairs; the radical ones, as well as one or two on the lower part of the stem, are in 5 (rarely 7) segments; those on the stem and side shoots in 3. All the segments are inclined to be elliptical, not linear. Panicle erect, terminal, viscid, dense, composed of 5 to 7 or 8 greenish-white flowers. Bractæe 3-cleft, or undivided. Segments of the calyx ovate, pointed, hairy and viscid. *Petals* roundish, a little pointed, with 3 simple nerves united at their base. Styles club-shaped.—The specific character in Dr. Withering, as well as the description from Linnæus, belong to the true *S. petraea*.



Hand n. 7998 Published by J. Smith & Co.





SAXIFRAGA hirta.

Trifid Hairy Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with 2 beaks, 1 cell, and many seeds.

SPEC. CHAR. Leaves in five, or three, deep, elliptical, acute lobes; hairy, like the stem and footstalks. Shoots ascending. Stem erect, leafy, with few flowers. Petals obovate, with three simple nerves.

SYN. *Saxifraga hirta.* *Donn. Cant. ed.* 5. 107.

WE have received from the worthy Curator of the Cambridge garden living plants of this Saxifrage under the above name, along with several others, all of Scottish growth; but the specimen in our plate was communicated by Mr. Joseph Woods from a garden, as being a plant found by Mr. Mackay in Ireland. It proves distinct from all we can find described of this intricate tribe. It flowers in May, or early in June, and forms lax perennial tufts, with ascending leafy shoots, and erect flowering stems. The leaves have broad flat footstalks, marked with a central groove, and exceeding their own length. They are themselves deeply divided or fingered, the lobes 3 or 5, the 2 outer ones in the latter case less separated; all elliptical, acute, entire; fringed, like the shoots, with long, soft, white hairs. The stem varies in height according to circumstances, and is clothed with glandular hairs; it bears 3 or 4 loosely paniced, white, large flowers, accompanied by a few simple oblong bracteas. The petals are obovate, in which this species differs from *S. palmata*, t. 455, though in many points they agree, especially in their pubescence. Three green simple ribs are found in each petal, combined for a short distance from the bottom.



June 1, 1911, collected by Dr. H. H. Hensley, June 1, 1911



1

SAXIFRAGA platypetala.

*Broad-petalled Saxifrage.**DECANDRIA Digynia.*

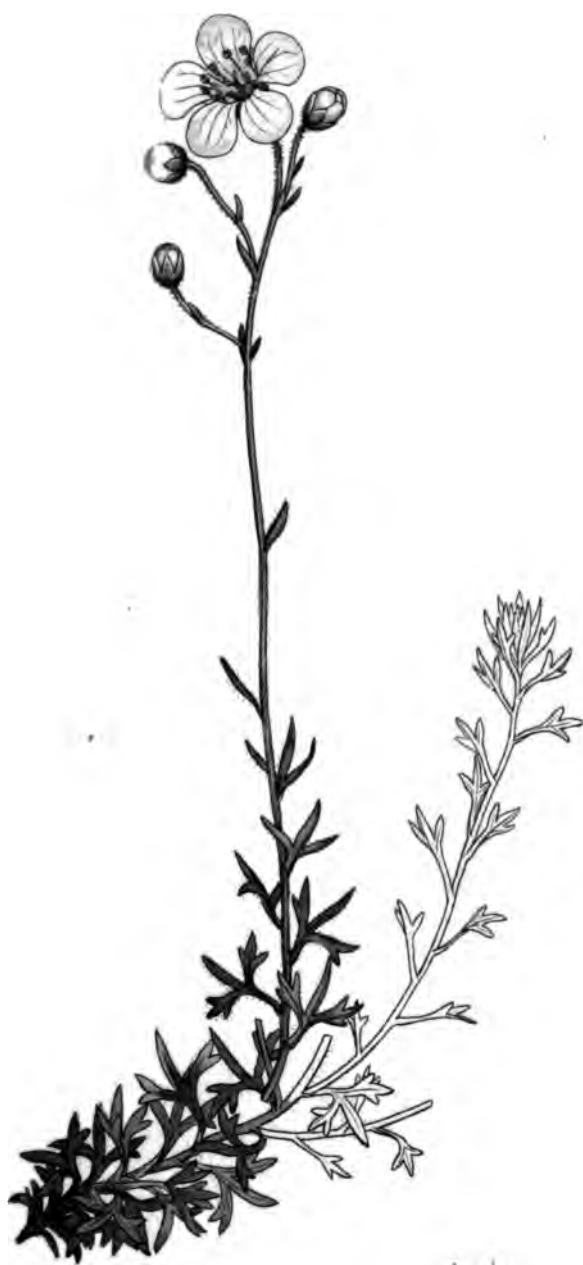
GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with 2 beaks, 1 cell, and many seeds.

SPEC. CHAR. Leaves in three or five bristle-pointed segments. Shoots procumbent. Stem somewhat leafy. Petals obovate, nearly orbicular.

SYN. *Saxifraga platypetala.* *Sm. Tr. of Linn. Soc.* v. 10. 341.

MR. TURNER gathered this Saxifrage upon Snowdon in 1802, and communicated it to us long ago as a new species, which we find confirmed by an examination of all the books and specimens that have come in our way. Mr. G. Don found the same on the mountains of Clova, Angusshire, as will appear, among many other interesting discoveries of his, in the 10th vol. of the Linnean Society's Transactions, part 2.

It is perennial, agreeing greatly in habit with *S. hypnoides*, t. 454, but is usually more luxuriant. The leaves are less simple, being almost universally divided into three, sometimes five, lobes, a few on the upper part of the flowering stem only being undivided. Each lobe is awned or hair-pointed. The petals, very useful in discriminating *Saxifragæ*, are remarkably different, being so broad in their limb as to be almost orbicular. They have three principal ribs, united in the lower part, of which the middlemost is either quite simple, or deeply cloven into two simple branches, while the lateral ribs send off numerous irregular fine branches, towards the edge of the petal. The leaves and stem are clothed with scattered soft hairs, and the flowerstalks and calyx with brownish glandular viscid ones.



May 1, 1900 published by the University of Wisconsin





SAXIFRAGA elongella.

*Long-stalked Saxifrage.**DECANDRIA Digynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with 2 beaks, 1 cell, and many seeds.

SPEC. CHAR. Leaves in three or five bristle-pointed segments; their base elongated: the uppermost linear and undivided. Flowerstalks very long and naked.

SYN. *Saxifraga elongella.* *Donn. Cant. ed.* 5. 107.
Sm. Tr. of Linn. Soc. v. 10. 340.

OUR specimens from Mr. G. Don were gathered on a rock by a river called Lintrathen, a mile and half north of Airly castle, Angusshire. The stems creep considerably, and are smooth, slightly leafy, throwing out numerous short, much more leafy, branches. The lower leaves on each branch, and one or two below the flowerstalk, are linear and undivided; the rest, from a long narrow base, divide suddenly into three oblong, acute, nearly equal lobes, the two outermost of which are sometimes cloven; all the leaves are more or less fringed with soft hairs, and their points tipped with a small bristle. What chiefly characterize this species are the solitary, simple, terminal, naked flowerstalks, very slightly glandular, each about two inches tall, and bearing a very large white upright flower, whose germen is inferior, calyx-teeth ovate, and petals obovate, entire, with three slender ribs, separating a little above the base, the lateral ones incurved to the midrib before they reach the top. In cultivated specimens there are sometimes one or two lateral 2-flowered stalks, but this is not natural to the plant. It blossoms early in summer.

2277



May, 1900, published by J. B. Swinney, Ltd.



1

SAXIFRAGA hypnoides.

Mossy Saxifrage, or Ladies' Cushion.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Capf.* with 2 beaks, 1-celled. *Seeds* numerous.

SPEC. CHAR. Leaves linear, undivided or three-cleft. Shoots procumbent. Stem erect, almost naked.

SYN. *Saxifraga hypnoides.* *Linn. Sp. Pl.* 579. *Huds.* 182. *With.* 407. *Lightf.* 224.*S. muscosa, trifido folio.* *Raii Syn.* 354.

TUFTS of this saxifrage often clothe rocks, whose inequalities are filled with black turfy earth, on the mountains of Wales, Scotland, and the north of England. We have gathered it on Ben Lomond, and on Arthur's Seat near Edinburgh. The specimen here represented was sent fresh from North Wales, by J. W. Griffith, Esq. It flowers in May, and often again sparingly in July and August.

Roots fibrous, long and slender, perennial, throwing out many procumbent leafy shoots, which grow matted together, forming thick tufts, and from the common origin of which arises a solitary erect round stem, bearing two or three straggling linear undivided leaves, and terminating in an upright panicle of a few large white flowers. Leaves alternate, linear, acute, pale green, smooth, their edges only often hairy with soft white woolly filaments; the leaves on the shoots simple and undivided; those at the bottom of the stem all deeply three-cleft, but never (we believe) more compound. Bractææ solitary at each subdivision of the panicle, lanceolate, and (like its branches) clothed with viscid short hairs. Calyx also viscid, its segments acute. Petals lanceolate, approaching to an elliptical form, acute, entire, yellowish at the base, ribbed with three green lines, which are all united for some distance above their origin, and the central one mostly branched near the top. Stamina subulate, five of them rather the shortest. Styles still shorter, nearly erect; Stigmas blunt. This species grows well in gardens in a shady situation. By a careful attention to the above characters it may be known from all other *Saxifraga*. The *S. ajugifolia* is very like it, but has all the leaves 3 or 5-cleft, as well as more numerous, though much smaller and yellower, flowers, with blunt petals, whose mid-rib is not branched at the top. We should not wonder if this should prove to have been hitherto overlooked by British botanists, as we find by Mr. Davall has been the case in Switzerland.

The student of natural genera may be amused with tracing the affinity, and yet distinction, between this genus, the *Adoxa*, and their connecting link *Chrysosplenium*.



Androsace hypoleuca (L.) Hook. & Arn.



SAXIFRAGA pedatifida.

*Pedatifid Saxifrage.**DECANDRIA Digynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Caps.* with 2 beaks, 1 cell, and many seeds.

SPEC. CHAR. Radical leaves kidney-shaped, divided in a pedate manner into seven lobes: stem-leaves palmate or linear. Stem naked below, branched. Petals linear-obovate.

SYN. *Saxifraga pedatifida*. *Ehrh. Exsicc. n.* 15. *Sm. Tr. of Linn. Soc. v.* 10. 340.

S. quinquefida. *Donn. Cant. ed.* 5. 107.

EHRHART, a very accurate observer of whatever plants he could procure, first distinguished this species from *S. geranioides*, with which his countrymen the Swiss seem to have confounded it, and he gave it the above apt name. Mr. G. Don, and the late Mr. J. Mackay, both gathered this plant in the Highlands, the former on the mountains of Clova, Angusshire. Our figure is unavoidably taken from a cultivated specimen. This Saxifrage flowers in May, and is, of course, perennial, forming spreading cushion-like tufts, by means of its long and branching shoots, being one of the most rambling of its tribe. The very numerous radical leaves are deeply cut into three lobes, which vary greatly in breadth, and the side ones are again lobed in a pedate manner; all are acute, and somewhat fringed, like their long narrow flat footstalks. The flowerstalks are a span high, central and solitary, slightly hairy; naked below; branched and leafy above, such upper leaves being some deeply and narrowly palmate, others undivided. The flowers are numerous and corymbose, but proportionably small. Germen inferior. Calyx hairy, lanceolate. Petals white, obovate but narrow, their ribs much like those of *S. elongella*.



Stachys recta L. var. *recta* Greene





SCLERANTHUS annuus.

*Annual Knawel,**DECANDRIA Digynia.*

GEN. CHAR. *Cal.* of one leaf. *Cor.* none. *Seeds* two, enclosed in the calyx.

SPEC. CHAR. Calyx of the ripe fruit with sharp spreading teeth. Stems spreading.

SYN. *Scleranthus annuus.* *Linn. Sp. Pl.* 580. *Huds. Fl. An.* 178. *With. Bot. Arr.* 436. *Relh. Cant.* 165. *Sibth. Ox.* 138.
Knawel. Raii Syn. 159,

NOTHING can be more common on a sandy soil than *Scleranthus annuus*, especially in fallow fields. It is an annual, flowering about the middle of summer, and sowing its seeds very abundantly in autumn, which produce a crop of young plants that generally survive the winter, or, if destroyed, are replaced by another crop arising from those seeds that happen not to vegetate till spring.

Root annual, long, not much branched. Stems very numerous, spreading in all directions, the outermost decumbent at the base only, not prostrate their whole length, all round, a little downy, much branched, leafy, pale, sometimes reddish. Leaves opposite, united at their base by a dilated, membranous and downy margin, linear, somewhat keeled, acute, smooth, of a grassy green, not glaucous nor silvery. Flowers of the same colour, sessile, in terminal leafy clusters. Calyx with 10 ribs, and cloven half way down into 5 sharp spreading teeth, a little membranous at their edges. Stamina shorter than the calyx, sometimes 10, but generally from 5 to 8, of which several are short and imperfect. Germen superior, ovate. Styles spreading. Stigmas downy. Seed enclosed in the permanent hardened calyx, often solitary (as several writers remark); but we have found two, or at least the unripened rudiments of two.



THE WISCONSIN

Published weekly, except on Sundays and public holidays, at the
office of the Wisconsin State Journal, No. 100 North Second Street,
Milwaukee, Wis., by J. J. WISCONSIN, Proprietor.
Subscription price, \$5.00 per annum in advance.
Single copies, 10 cents.
Entered as second-class matter, July 1, 1879.
Postage paid at Milwaukee, Wis., July 1, 1879.
Acceptance for mailing at special rate of postage provided for in
Act of October 3, 1917, authorized on July 1, 1918.
Postage paid at Milwaukee, Wis., July 1, 1918.

Published by J. J. Wisconsin, Proprietor, at the Wisconsin State Journal, No. 100 North Second Street, Milwaukee, Wis.
The Wisconsin State Journal is published weekly, except on Sundays and public holidays, at the office of the Wisconsin State Journal, No. 100 North Second Street, Milwaukee, Wis.
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SCLERANTHUS perennis,
Perennial Knawel.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* of one leaf. *Cor.* none. *Seeds* two, enclosed in the calyx.

SPEC. CHAR. Calyx of the ripe fruit with obtuse incurved teeth. Stems prostrate.

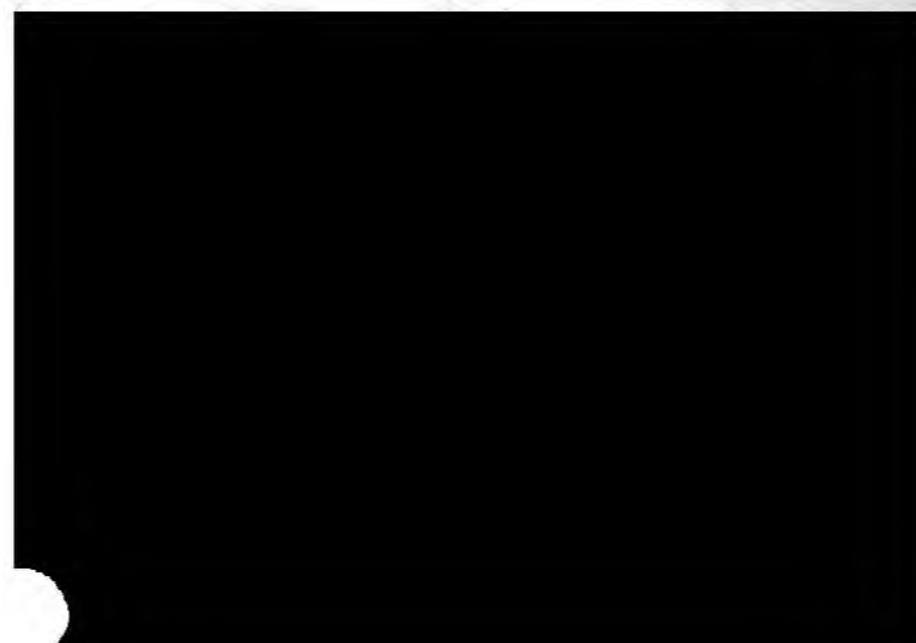
SYN. *Scleranthus perennis.* *Linn. Sp. Pl.* 580. *Huds. Fl. An.* 178. *With. Bot. Arr.* 437.

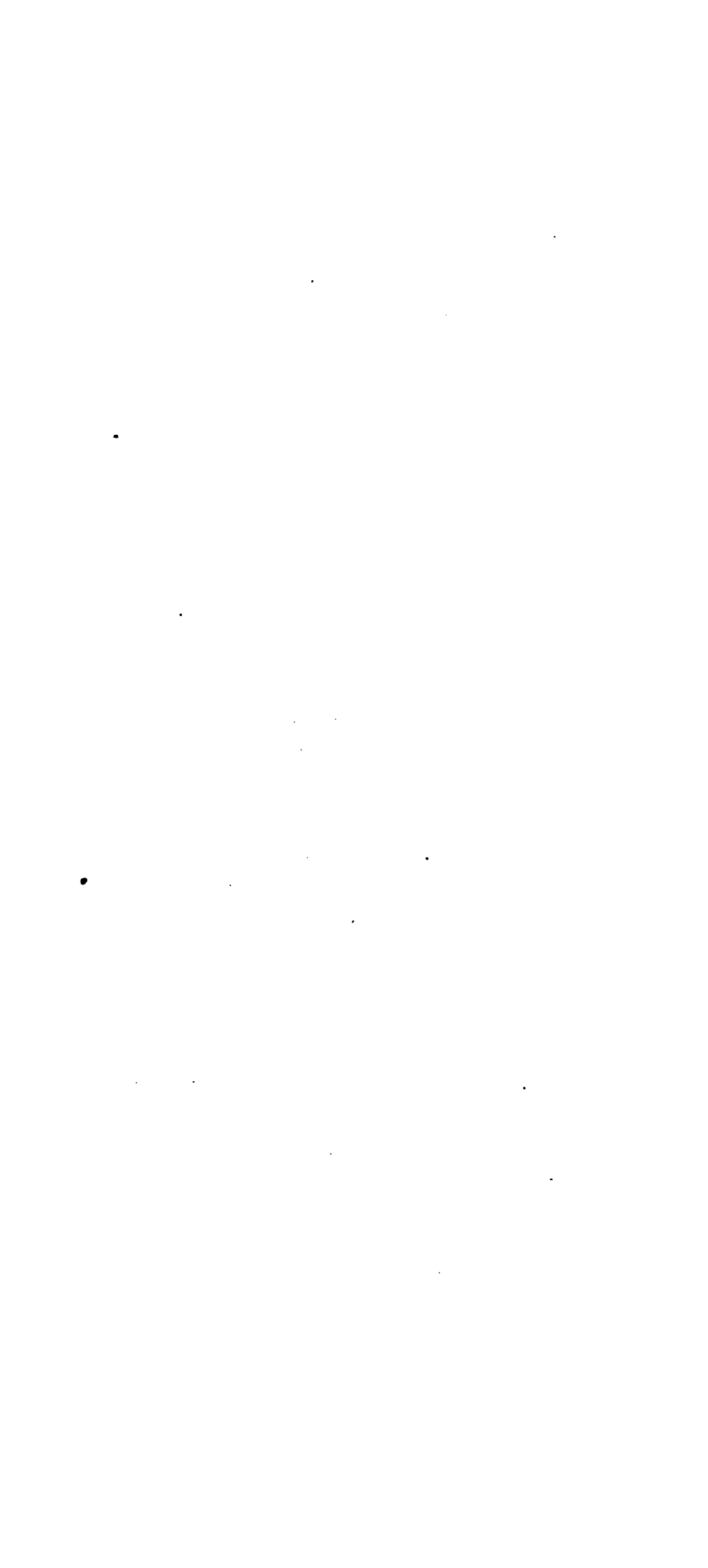
Knawel incanum flore majore, perenne. Raii Syn. 160. *t.* 5. *f.* 1.

THIS is much more rare than the preceding, having hitherto been observed only in Norfolk and Suffolk, always on the driest barren sandy heaths. We received it from the neighbourhood of Bury, by favour of W. Mathew, Esq. flowering in November, for it is later in that respect than authors mention.

The root is said to be perennial, but that we have not been able to verify. Stems perfectly prostrate and close pressed to the ground, downy in the upper part, often purplish, much branched, especially towards their extremities. Leaves glaucous, "covered with shining pellucid tubercles," according to Mr. Mathew's remark, and sometimes downy. Segments of the calyx with a more membranous border than in *S. annuus*, their points much more obtuse and curved inward. The earlier flowers in the end of summer are of a very silvery appearance, and attract the eye at a distance. Filaments not all perfect, Calyx in the flowering state cloven rather more than half way down, but not so when the germen swells, externally pubescent. When growing old the whole plant becomes of a reddish brown. Dillenius's figure in Ray's Synopsis is too large and upright, and shows nothing that could serve to discriminate so difficult a plant.







36.
[1060]

SAPONARIA officinalis.

Soapwort.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* of 1 leaf, naked. *Petals* 5, with claws. *Caps.* superior, oblong, mostly of 1 cell.


SPEC. CHAR. *Calyx* cylindrical. *Leaves* elliptic-lanceolate.

SYN. *Saponaria officinalis.* *Linn. Sp. Pl.* 584. *Sm. Fl. Brit.* 459. *Huds.* 183. *With.* 408. *Hull.* 94. *Relb.* 167. *Sibth.* 138. *Abbot.* 94. *Curt. Lond. fasc.* 2. *t.* 29. *Woodv. Suppl. t.* 251.

Lychnis Saponaria dicta. *Raii Syn.* 339.

GATHERED by the sides of woods between the Half-way house and Gad's-hill in the way to Rochester, where it is most assuredly wild, as well as in many other parts of the kingdom about hedges and thickets, flowering in August and September.

Root perennial, deep and much branched, producing many upright, round, leafy, panicle stems, about 18 inches high. Every part of the herb is smooth, and slightly succulent. *Leaves* opposite, joined at the base, broad-lanceolate, entire, 3-ribbed. Panicle roundish, of numerous handsome bluish-coloured flowers, whose very sweet scent is to many persons oppressive.



1060



Engelm. Published by P. Leach, 1847.



DIANTHUS Armeria.

Deptford Pink.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* cylindrical, of one leaf, with about 4 scales at the base. *Petals* 5, with claws. *Caps.* cylindrical, one-celled.

SPEC. CHAR. Flowers clustered, in bundles. Calyx-scales lanceolate, downy, equal to the tube.

SYN. *Dianthus Armeria.* *Linn. Sp. Pl.* 586. *Huds. Fl. An.* 183. *With. Bot. Arr.* 440. *Sibth. Ox.* 139. *Caryophyllus latifolius barbatus minor annuus, flore minore.* *Raii Syn.* 337.

ALTHOUGH less striking at first sight than many of its beautiful family, the Deptford Pink will be found on minute examination to be very delicately pencilled, and to possess a great degree of elegance in its form. It loves a gravelly soil, and grows, as Mr. Woodward informed Dr. Withering, not unfrequently in Norfolk. Mr. Sowerby gathered the present specimen a little beyond the Falstaff Inn on Gad's hill, Kent.

Root annual, tapering and zigzag. Stem round, leafy, erect, subdivided, the branches very straight, downy, terminated by little compound clusters of inodorous flowers, which appear in July, and continue to bloom till very late in autumn. The lower leaves are broad and somewhat spatulate; those at each joint of the stem, and under the flowers, narrow, lanceolate and acute; all opposite, entire, a little downy. Scales of the calyx of the form of the upper leaves, and as long as the tube. Petals a little toothed, narrow, sprinkled with minute red dots, and marked with more or less of a line, forming an eye-like ring in the centre of the flower. Each flower lasts but one day, and there is seldom above one expanded at a time in each cluster. The seeds are black, flat and minute.



Dianthus barbatus L.



1

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[956]

DIANTHUS prolifer.

Proliferous Pink.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* cylindrical, of one leaf, with scales at the base. *Petals* 5, with claws. *Caps.* cylindrical, superior, of 1 cell.

SPEC. CHAR. Flowers clustered, in heads. Calyx-scales ovate, blunt, beardless, membranous, overtopping the tube.

SYN. *Dianthus prolifer.* *Linn. Sp. Pl.* 587. *Sm. Fl. Brit.* 461. *Huds.* 184. *With.* 409. *Hull.* 94.

Caryophyllus sylvestris prolifer. *Dill. in Raii Syn.* 337.

THIS very uncommon *Dianthus* grows on a gravelly, or rather marly, soil, in not more than 3 or 4 places in England. Dillenius first had it from Suffex: Mr. Ballard, an accurate and experienced observer, has found it in Worcestershire: Mr. Humphrey met with it many years ago in the borders of a field out of St. Austin's gates, Norwich, where it still occurs, more or less sparingly in different seasons, flowering from July to the very end of autumn.

Root annual, small. Stems erect, rushy, slender, little







1

DIANTHUS Caryophyllus.
Clove Pink, or Carnation.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* cylindrical, of one leaf, with about 4 scales at the base. *Petals* 5, furnished with claws, *Caps.* cylindrical, one-celled.

SPEC. CHAR. Flowers solitary. Scales of the calyx almost rhomboid, and very short. Petals notched, beardless.

SYN. *Dianthus Caryophyllus.* *Linn. Sp. Pl.* 587. *Hudf. Fl. An.* 184. *With. Bot. Arr.* 441. *Smith in Linn. Transf.* v. 2. 299.

Caryophyllus simplex flore minore pallido rubente. Raii Syn. 336.

GATHERED on the walls of Rochester castle in June last. It is plentiful on walls in that neighbourhood, and sometimes occurs about those of other old towns. Ray and Hudson take it for an outcast of gardens. Indeed it varies in size and colour, like all plants so circumstanced. Ours is surely the plant of Ray, and, we think, ought to be esteemed the real original species, rather than a variety as marked by Mr. Hudson. It agrees precisely with the specimens of Linnæus.

The root is perennial, and runs deep into the mortar, pro-



C. alba Planch. 116. f. Double-Lace





DIANTHUS deltoides.

*Maiden Pink.**DECANDRIA Digynia.*

GEN. CHAR. *Calyx* cylindrical, of one leaf, with about four scales at the base. *Petals* five, furnished with claws. *Capsule* cylindrical, one-celled.

SPEC. CHAR. Flowers solitary. Two lanceolate scales only to each calyx. Corolla notched.

SYN. *Dianthus deltoides*. *Linn. Sp. Pl.* 588. *Huds. Fl. An.* 184. *With. Bot. Arr.* 441. *Relb. Cant.* 167. *Caryophyllus minor repens nostras. Raii Syn.* 335.

FOUND on sandy banks and heaths in various parts of England, growing prostrate among grass and other herbs, for want of the natural shelter of which in a garden, it is not easily cultivated. It begins flowering in July, and lasts till very late in autumn. The petals vary much in colour, being sometimes of a very pale flesh colour, sometimes deep red, but are always

61.





1

DIANTHUS cæsius.

Mountain Pink.

DECANDRIA Digynia.

GEN. CHAR. *Calyx* cylindrical, of one leaf, with about four scales at the base. *Petals* five, furnished with claws. *Capsule* cylindrical, one-celled.

SPEC. CHAR. Stems mostly single-flowered. Scales of the calyx roundish and short. Petals notched, bearded. Leaves rough in the margin.

SYN. *Dianthus virgineus* β. *Linn. Sp. Pl.* 590.

D. glaucus. *Huds. Fl. An.* 185.

Armeriæ species flore in summo caule singulari. *Rais Syn.* 336.

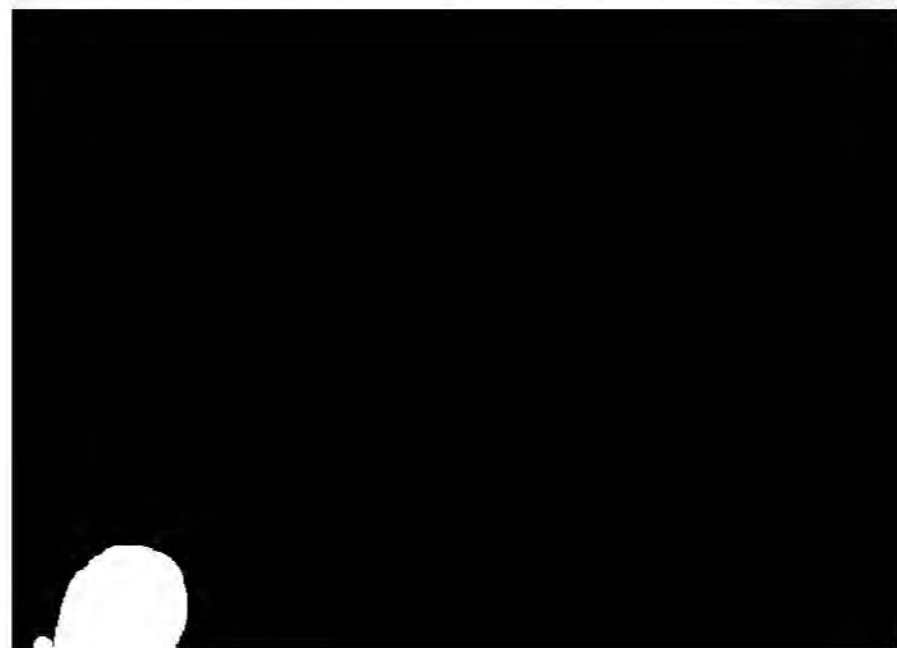
WE believe this plant has never yet been found in any part of Great-Britain, except on Cheddar rocks, Somersetshire, where it was gathered in Ray's time by Mr. Brewer, and since by the Rev. Mr. Lightfoot, and some other botanists. The flowers appear in July, and are highly fragrant.

The whole history of this species in English writers is a heap of confusion. Dr. Stokes alone has formed any tolerable

idea of it. Dr. Stokes alone has formed any tolerable









CUCUBALUS baccifer.

Berry-bearing Chickweed.

DECANDRIA Trigynia

GEN. CHAR. *Cal.* of 1 leaf, inflated. *Petals* 5, with claws. *Berry* superior, of 1 cell, with many seeds.

SPEC. CHAR.

SYN. *Cucubalus baccifer.* *Gærtn.* v. 1. 376. t. 77. f. 7.
Sm. Fl. Brit. 464.

C. bacciferus. *Linn. Sp. Pl.* 591. *Huds.* 185.
With. 411. *Hull.* 97. *Dicks. H. Sicc. fasc.* 4. 9.

C. Plinii. *Dill. in Raii Syn.* 267.

COMMUNICATED by Mr. W. Borrer from his garden. We have never seen a wild specimen. Dillenius received it from Anglesea, and admitted it into his edition of Ray. The latter noticed it near Frankfort, and afterwards in Italy and the south of France; see his *Observations* 79, and his *Cat. Stirp.* 7, but has not mentioned it as a British plant. It grows in hedges, flowering in June and July, and is perennial. In autumn the black berries, so unusual in this natural order, by which it is distinguished from the genus *Silene*, are very remarkable. These are supposed to be poisonous, but we know not on what foundation.

The root creeps. The stems are weak and straggling, 2 or 3 feet long, much branched, forked, leafy, round, hollow, rough with deflexed hairs. Leaves opposite, on stalks, ovate, entire, downy. Flowers axillary and terminal, solitary, drooping, on downy stalks. Calyx large, bell-shaped, downy, thin, permanent. Petals greenish-white, cloven, generally more or less crowned, but in that respect they vary. Stamina inserted into the petals and the receptacle alternately. Berry stalked, globular, black and shining.

1577



Illustrated. Published by J. G. Smith, London.



S I L E N E *anglica.*
English Catchfly.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* swelling, of one leaf. *Petals* 5, with claws. *Capf.* superior, imperfectly 3-celled, bursting at the summit. *Seeds* many.

SPEC. CHAR. Hairy, viscid. Petals notched. Flowers lateral, erect, alternate. Lower fruit spreading or reflexed.

SYN. *Silene anglica.* *Lim. Sp. Pl.* 594. *Sm. Fl. Brit.* 465. *Huds.* 187. *Witb.* 413. *Hull.* 97. *Relb.* 167. *Abbot.* 95. *Curt. Lond. fasc.* 4. t. 30. *Dicks. H. Sicc. fasc.* 13. 18.

Lychnis sylvestris, flore albo minimo. *Ruii Syn.* 339.

LIKE other annuals which grow in cultivated fields occasionally, but are not common weeds, this *Silene* occurs now and then on light sandy soils among corn, turnips, &c., but is rarely seen for several years in succession in any one spot.



June 1. 1863. Published by J. S. Sowerby, London.



1

1

S I L E N E quinquevulnera.

Variegated Catchfly.

DECAKDRIA Trigynia.

GEN. CHAR. *Cal.* swelling. *Petals* five, furnished with claws, and with a crown at the mouth. *Caps.* three-celled.

SPEC. CHAR. Flowers solitary, lateral, alternate; limb of the petals roundish and entire. Fruit erect.

SYN. *Silene quinquevulnera.* *Limn. Sp. Pl.* 595. *Hudf. Fl. An.* 188. *Witb. Bot. Arr.* 449.

MR. Hudson is our authority for considering this pretty plant as of British growth, having mentioned it in his 2d edition of *Flora Anglica* as a native of sandy fields about Wrotham in Kent. It is commonly cultivated in flower-gardens, and may frequently be found almost naturalized on heaps of rubbish and other such places.

From a small fibrous annual root arise several flaccid spread-





June 1. 1805. Published by J. J. Sowerby, London.



S I L E N E nutans.

Nottingham Catch-fly.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* swelling. *Petals* 5, with claws, and with a crown at the mouth. *Caps.* three-celled.

SPEC. CHAR. *Petals* cloven. Lateral flowers drooping, all towards one side. Panicle drooping.

SYN. *Silene nutans.* *Lin. Sp. Pl.* 596. *Huds.* 188. *With.* 413. *Fl. Dan. t.* 242.

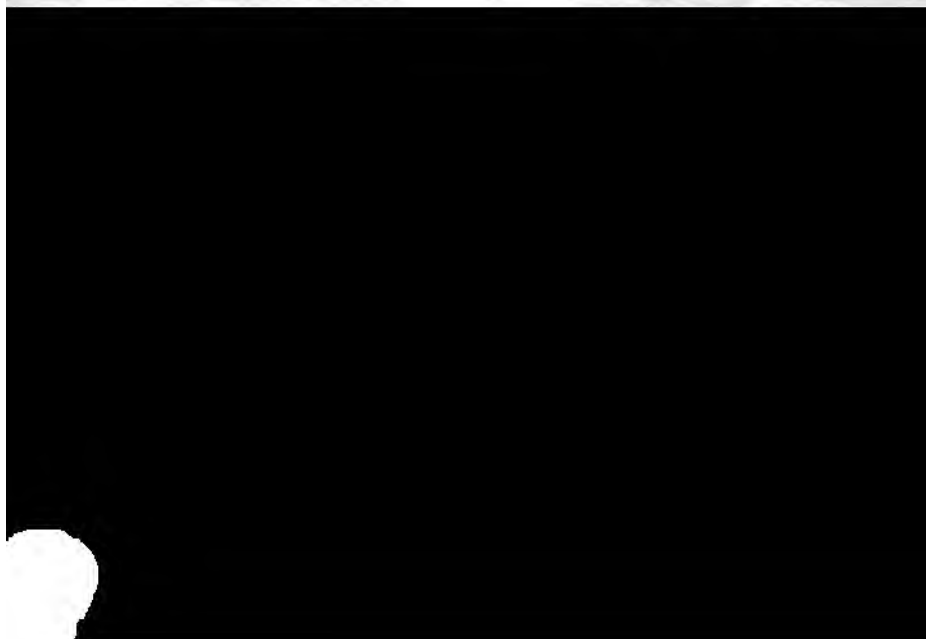
Lychnis sylvestris alba 9 Clusii. *Raii Syn.* 340. *Ger. em.* 470. *Deering Nott.* 137.

WE received this from Nottingham Castle by favour of Mr. Ordoyno. It loves a lime-stone soil, and was observed upon rocks in the bed of the river Dove, Derbyshire, by Mr. Woodward; and near North Queen's-ferry, for the first time we believe in Scotland, by Mr. J. Mackay in 1793. It is perennial, and flowers in June and July.

Stems several, simple, bowed at the base, then erect, a foot or more in height, leafy, jointed, round, downy, viscid in the upper part, terminating in a forked panicle, the summit and branches of which all droop towards one side. Leaves entire, pointed, downy, of a palish green, lanceolate; the radical ones inclining to chevronate, and forming thick tufts. Flowers



Handwritten text, likely a signature or date, possibly reading "J. G. Smith 1845" or similar.





Asclepias tuberosa L. f. *Asclepias tuberosa* L. f.

CUCUBALUS Behen.

Bladder Campion.

DECANDRIA Trigynia.


GEN. CHAR. *Cal.* swelling. *Petals* five, furnished with claws, not crowned at the mouth. *Caps.* three-celled.

SPEC. CHAR. Calyx nearly globular, smooth, reticulated with veins. Leaves ovato-lanceolate, glaucous, smooth.

SYN. Cucubalus Behen. *Linn. Sp. Pl.* 591. *Huds. Fl. An.* 186. *With. Bot. Arr.* 445. *Relb. Cant.* 168. *Lychnis sylvestris*, quæ Ben album vulgo. *Raii Syn.* 337.

FOUND every where in corn-fields, pastures, and by way-fides, flowering abundantly in the middle and latter part of summer, and thriving though frequently covered with dust. It appears to most advantage in a chalky soil.

Root perennial. Radical leaves in tufts, spatulate; those on the stem lanceolate or ovate; all of them entire, pliable and somewhat succulent, glaucous, with a very green pulp, mostly







1

SILENE maritima.

Sea Campion.

DECANDRIA Trigynia:

GEN. CHAR. *Cal.* swelling, of one leaf. *Petals* 5, with claws. *Capf.* superior, imperfectly 3-celled, bursting at the summit. *Seeds* many.

SPEC. CHAR. Flowers mostly solitary, terminal. Petals cloven, crowned at the mouth. Calyx smooth, reticulated with veins. Stems prostrate at the base.


SYN. *Silene maritima.* *Witb.* 414. *Sm. Fl. Brit.* 468. *Hull.* 98.

S. amœna. *Huds.* 188. *Lightf.* 227.

Cucubalus Behen β. *Linn. Sp. Pl.* 591.

Lychnis maritima repens. *Raii Syn.* 337.

ABUNDANT on the sea shore both in sandy and rocky places, flowering in August and September. Our specimen was sent by Mr. W. Borrer from Suffex. Like some other maritime plants it is also truly alpine, flourishing in the stony beds of mountain torrents. Having cultivated it several years in various soils, and propagated it by seed, we can now speak to its certainty as a species; indeed few plants vary less in







[illegible]

CUCUBALUS Otites.

Spanish Campion.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* swelling. *Petals* five, furnished with claws, not crowned at the mouth. *Capf.* three-celled.

SPEC. CHAR. Flowers dioicous. *Petals* linear, undivided.

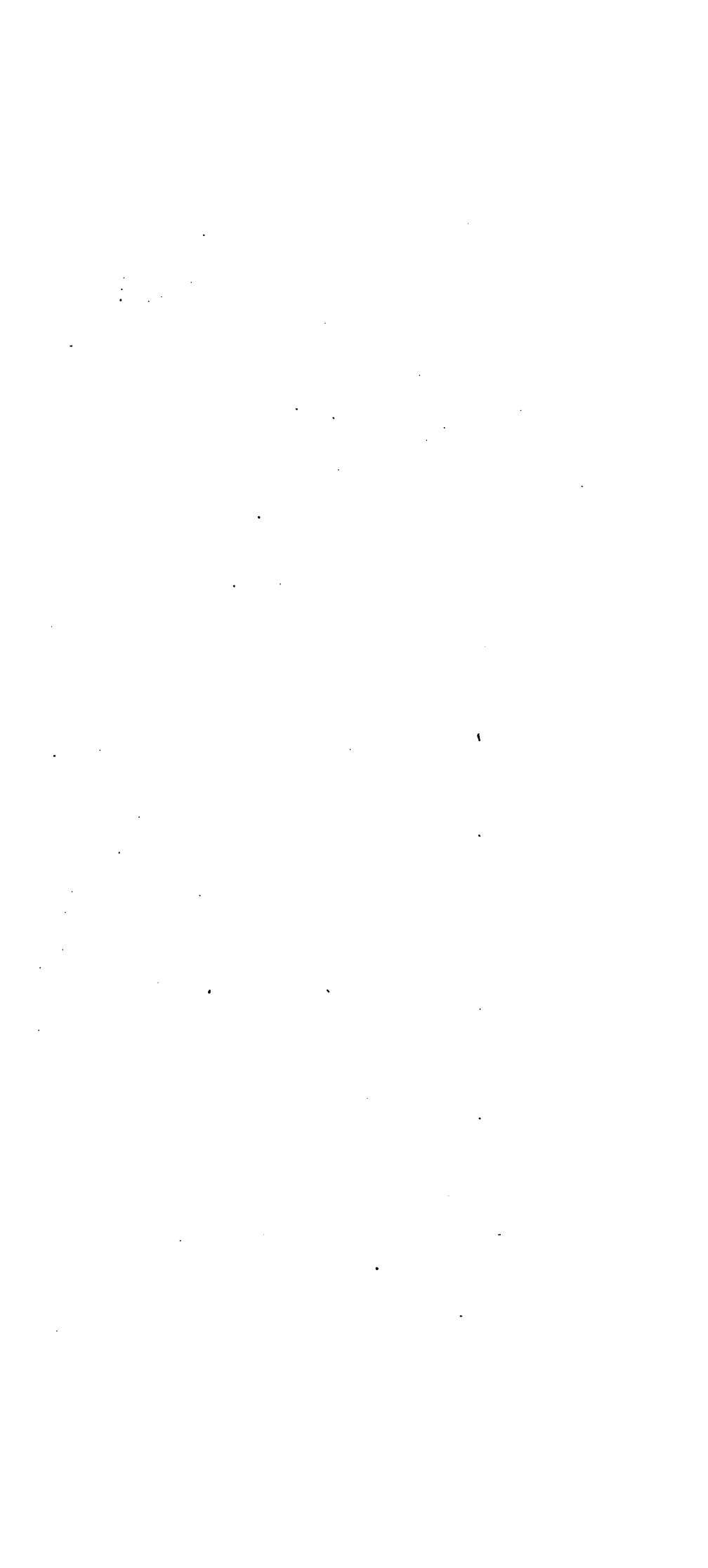
SYN. *Cucubalus Otites.* *Linn. Sp. Pl.* 594. *Huds. Fl.* An. 186. *Witb. Bot. Arr.* 446. *Relb. Cant.* 168.

Lychnis viscosa flore muscosa. *Raii Syn.* 340.

THIS plant, the least ostentatious of all its tribe, is peculiar to dry, sandy, and gravelly soils in a very few parts of England, chiefly Norfolk, Suffolk, and Cambridgeshire. The flowers appear in July and August; and although very numerous, may from their green colour, be easily overlooked among the panicles of surrounding grasses. Our present specimen was sent from Bury by Wm. Matthew, Esq.

The root is perennial and strong, running deep into the ground, and producing many thick tufts of narrow, spatulate, entire, sharp-pointed leaves, which are viscid, and rough with minute, thick-set, curved and sometimes stellated, hairs, as are likewise the stem and flowerstalks. The stem is from one to two feet high, erect, viscid in the upper part, and producing numerous little opposite tufts of pedunculated flowers, intermixed with membranous bractæ. The flowers are male on one root, and female on another; but the former often produce abortive pistilla (as in our figure), and the latter abortive stamina. We suspect the number of styles varies from two to five. We have found in both sexes the same narrow entire yellowish petals, though they are said to be sometimes wanting; they are very much like those of *Saponaria lutea* *Linn.* (*Smith Spicil.* t. 5.) to which this plant is allied in habit; but the capsule of that has only one cell. Fig. 1 and 2 represent the pistilla of the female flowers; the others belong to the male.





S I L E N E conica.

Corn Catchfly.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* of 1 leaf, swelling. *Petals* 5, with claws. *Capf.* superior, imperfectly 3-celled, bursting at the top. *Seeds* many.

SPEC. CHAR. Stem forked. *Petals* cloven, crowned. Leaves soft. Calyx when in fruit conical, with thirty furrows.

SYN. *Silene conica.* *Linn. Sp. Pl.* 598. *Sm. Fl.* *Brit.* 470. *With.* 416. *Hull.* 98.

S. conoidea. *Hudf.* 189. *Linn. Sp. Pl.* 598?

Lychnis sylvestris angustifolia, *caliculis turgidis striatis.* *Dill. in Raii Syn.* 341.

L. caliculis striatis, secunda Clusii. *Ger. em.* 470.

THIS species of *Silene* is a native of Kent, but, as far as we know, of no other part of Britain. Mr. Dillwyn supplied us with specimens from the sand-hills near Sandown Castle, where it grew in the time of Dillenius. It is annual, flowering in July, and thriving in the most barren sandy soil.

Root small, tapering, but little branched. Stem erect, round, downy, somewhat viscid, branched, leafy, repeatedly forked in the flowering part, various in height. Leaves opposite, linear-lanceolate, entire, acute, clothed all over with soft short down, and of a grayish green colour. Flowers from the divarications of the stem, solitary, stalked, erect, in an evening exhaling a sweet smell, approaching to that of a honeysuckle, but weaker. Calyx cylindrical, becoming conical as the fruit swells, membranous, with 30 green downy prominent equal ribs, and 5 sharp teeth. Petals narrow, their limb cloven, rose-coloured, with a sharp tooth on each side of the base, and a notched scale above, forming the crown. Capsule ovate. Seeds rough.

It is more than probable that the *S. conoidea* is a very slight variety of this, with smoother leaves. The petals being undivided is not an invariable mark. Whatever the figures of Lobel and Gerarde cited in *Fl. Brit.* may be intended for, we now prefer that of Gerarde above quoted as the most exact representation.



Fig. 1. 1866. Published by Mr. J. S. Edwards, London.



SILENE noctiflora.
Night-flowering Catchfly.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* swelling. *Petals* 5, with claws, and with a crown at the mouth. *Caps.* three-celled.

SPEC. CHAR. Calyx with ten angles, and teeth as long as its tube. Stem forked. Petals cloven.

SYN. *Silene noctiflora.* Linn. *Sp. Pl.* 599. Huds. *Fl. An.* 189. With. *Bot. Arr.* 452. Relh. *Cant. Suppl.* 1. 13. Sibth. *Ox.* 140.

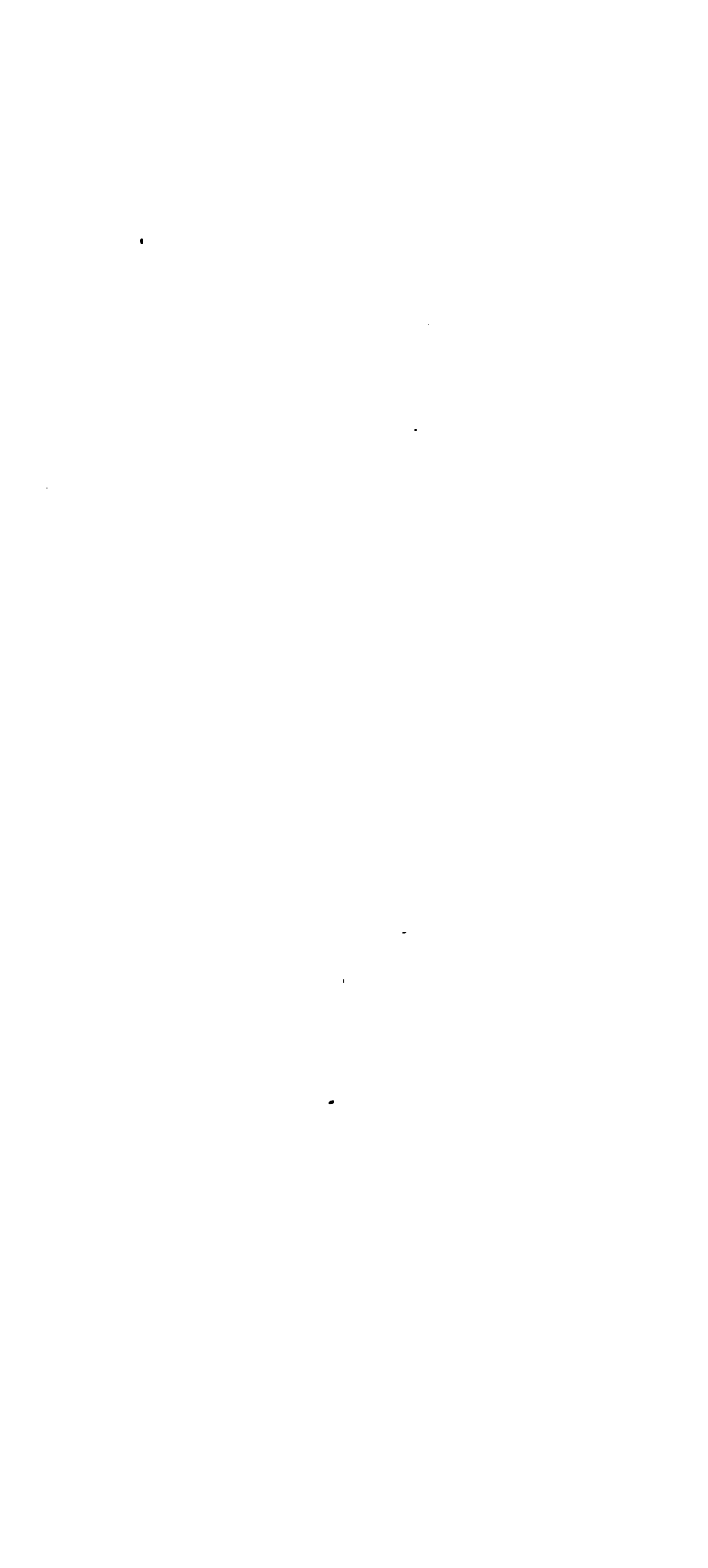
Lychnis noctiflora. Raii *Syn.* 340.

IN sandy fields of the midland and southern counties, not rare in Norfolk and Suffolk, flowering about July.

Root annual, small in proportion to the herb, which often becomes very luxuriant in a manured soil. Stem erect, round, hairy, leafy, repeatedly forked in the upper part. Leaves soft and downy, lanceolate, sessile, the lower ones broadest, and the lowest obovate. Flowers solitary at the divisions of the stem, on hairy viscid stalks, which are short at first, but afterwards lengthened out to about an inch. Calyx white, with green angles and veins, its teeth almost as long as the tubular part. Petals of a cream colour tinged with red, their limb rolled in during the day, but unfolding in the evening, and then the flowers become very sweet-scented, at least while warm weather continues. We believe each flower lasts several days, the petals rolling themselves up every evening till the impregnation is fully accomplished. If so, how is this involution performed? Does the action of light upon the upper surface of each petal stimulate that surface to contract? The phenomena of such flowers as expand or smell only by night, deserve the attention of the physiologist, for they are ruled by very constant laws. We recommend them to the evening meditations of the philosophic recluse, at "that best hour of musing" when the mind turns to Nature and its Author with peculiar complacency.



Dianthus barbatus L.



SILENE Armeria.

*Common or Lobel's Catchfly.**DECANDRIA Trigynia.*

GEN. CHAR. *Cal.* swelling, of one leaf. *Petals* 5, with claws. *Caps.* superior, imperfectly 3-celled, bursting at the summit. *Seeds* many.

SPEC. CHAR. Panicles forked, clustered, many-flowered. Petals notched, crowned with sharp teeth. Upper leaves heart-shaped, smooth.

SYN. *Silene Armeria*. *Linn. Sp. Pl.* 601. *Sm. Fl. Brit.* 471. *Huds.* 189. *With.* 415. *Hull.* 98. *Fl. Dan.* t. 559.

Lychnis viscosa purpurea latifolia lævis. *Dill. in Raii Syn.* 341.

Muscipula Lobelii. *Ger. em.* 601.

THE pretensions of this plant to a place in a British Flora seem to us very slight. Dr. Richardson informed Dillenius that it grew on the banks of the river half a mile below Chester, but no one has confirmed his account, nor strengthened it by finding the plant any where else in Britain. We never saw a British specimen, but have chosen a self-sown garden one, which seems to exhibit the natural appearance of the species. It is annual, flowering all July and August, and is commonly cultivated in gardens for ornament, being very easily propagated by seed.

Root small. Herb destitute of pubescence. Stem 6 to 18 inches high, round, branched, leafy, marked with a brown viscid ring under the upper joints, by which flies are caught, for what particular purpose has scarcely been guessed. Leaves opposite, sessile, entire, glaucous, very smooth, ovate or heart-shaped. Flowers erect, red, inodorous, in a flat-topped, forked, dense tuft, accompanied by small bractææ. Calyx tubular, smooth, coloured, membranous, with 10 ribs and as many teeth. Petals with long claws, an obcordate limb, and 2 erect sharp teeth. Capsule elliptical, placed on a long footstalk. Seeds many.



v



[1081]

SILENE acaulis.

Moss Campaign.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* swelling, of one leaf. *Petals* 5, with claws. *Capsf.* superior, imperfectly 3-celled, bursting at the summit. *Seeds* many.

SPEC. CHAR. Leaves linear, ciliated at the base. Stalks solitary, single-flowered. Petals crowned.


SYN. *Silene acaulis.* *Linn. Sp. Pl.* 603. *Sm. Fl. Brit.* 472. *Lightf.* 227. *t.* 12. *f.* 1. *With.* 416. *Hull.* 98. *Dickf. H. Sicc. fasc.* 1. 8.

Cucubalus acaulis. *Huds.* 187.

Lychnis alpina minima. *Raii Syn.* 341.

A NATIVE of the higher parts of the most alpine mountains of Britain, where its elegant blossoms appear in June and July, and its ripe capsules in August. Our specimens were collected on Snowdon, July 12th last, by Mr. D. Turner. We have been favoured with others from several friends in Scotland.

The root is perennial, running deep into the fissures of rocks, and branching at its crown into many short, leafy, prostrate

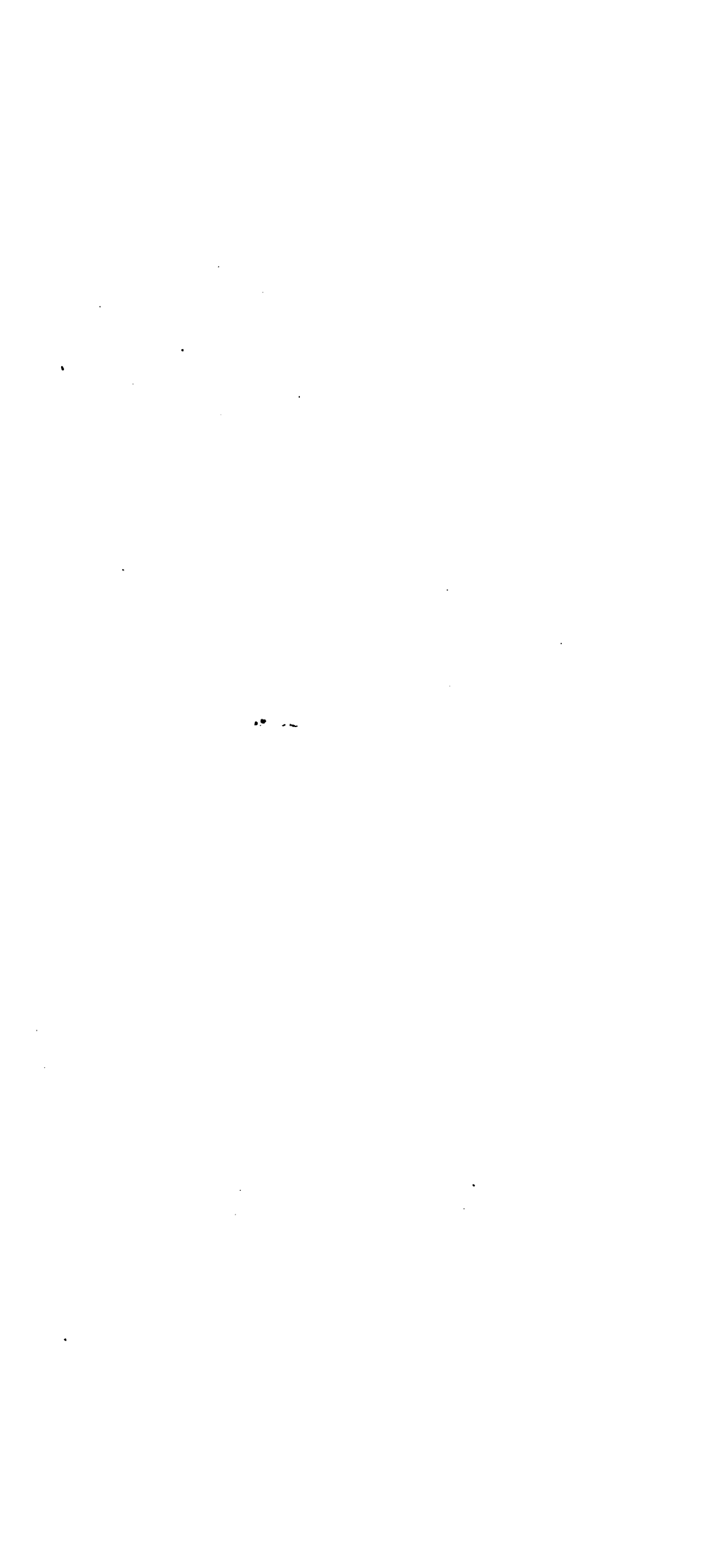


1081.



1081. 1081. 1081. 1081. 1081.





STELLARIA nemorum.

Wood Stitchwort.

DECANDRIA Trigyna.

GEN. CHAR. *Cal.* five-leaved, spreading. *Petals* five, cloven. *Capsule* one-celled, with many seeds.

SPEC. CHAR. Lower leaves, heart-shaped, on foot-stalks; upper ones ovate, sessile. Panicle dichotomous.

SYN. *Stellaria nemorum.* Linn. *Sp. Pl.* 603. Hudf. *Fl. An.* 190. With. *Bot. Arr.* 455.

Alfina montana, folio *Smilacis* instar, flore laciniato. *Raii Syn.* 347.

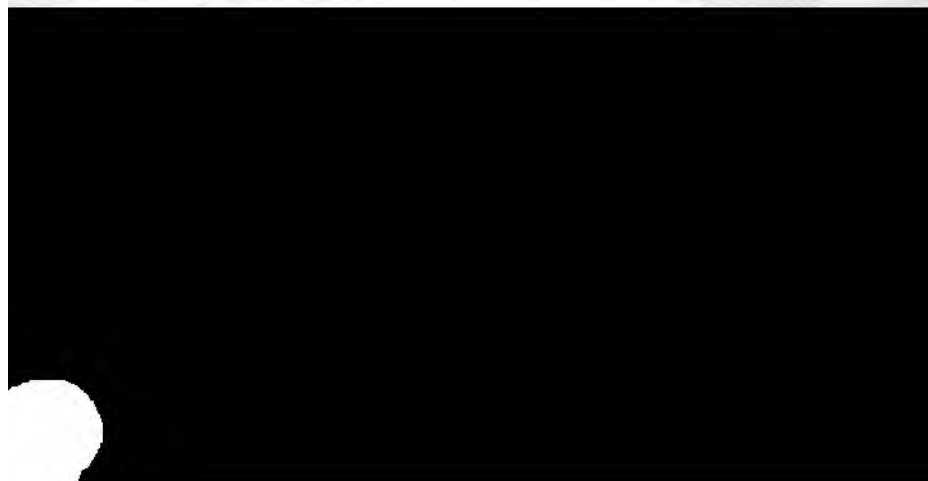
CONFINED to moist woods and the borders of clear shaded springs in the most northern parts of England, as well as in the low-lands of Scotland, flowering in May. Mr. Robson, to whom we are indebted for so many rare plants figured in this work, gathered the present specimen in Cliff-wood near Darlington.

Root perennial, small and creeping. Stems several, weak and lax, round, hollow, scattered here and there with hairs, chiefly in the upper part. Leaves pale green, tender and succulent. The numerous star-like flowers are visible at a distance, and of a delicate structure when closely examined.

For the consolation of fallible botanists we must remark that Linnæus in his *Flora Lapponica* (No. 186) confounds this plant with *Alfina media* and *Cerastium aquaticum*. The former may always be known, in all its numerous varieties, from this and every other plant of its natural order, by the hairy line on one side of its stem, first pointed out, if we remember right, by Mr. Curtis. The latter is distinguished from our *Stellaria* by being viscid, and much more hairy; its flowers much less conspicuous; calyx more oval, and less membranous; pauciele more leafy; and especially by all the stem-leaves being sessile, neither are they lengthened out into so long a point; not to mention its five styles, which are very constant.

Stellaria nemorum thrives very well in Chelsea garden.







STELLARIA media.

Common Chickweed.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, cloven. *Caps.* 1-celled, with 6 valves, and many seeds.

SPEC. CHAR. Leaves ovate. Stems procumbent, with a hairy alternate ridge on one side. Stamina 5 to 10.

SYN. *Stellaria media.* *With.* 418.

Alfine media. *Linn. Sp. Pl.* 389. *Huds.* 131. *Relb.*

128. *Sibth.* 105. *Curt. Lond. fasc.* 1. t. 20. *Fl.*

Dan. t. 438 & *t.* 525.

A. vulgaris, seu *Morsus gallinæ.* *Raii Syn.* 347.

WE most readily follow Dr. Withering in his removal of this plant from the genus of *Alfine*, with which it has no natural affinity, nor any agreement in botanical character, except having generally but 5 stamina. The genuine species of *Alfine* resemble *Arenaria tenuifolia* in habit, and have undivided petals (a very important mark) and a 3-valved capsule: the plant now under consideration has deeply cloven petals, and a 6-valved capsule, the essential characters, and all the habit, of a *Stellaria*, see our *t.* 92. Nothing is more common than for some plants of a genus to have occasionally, or even constantly, but half their proper number of stamina.



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STELLARIA holosteaa.

*Greater Stitchwort.**DECANDRIA Trigynia.*

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, cloven. *Capsule* of one cell, with many seeds.

SPEC. CHAR. Leaves lanceolate, serrulated. Petals two-lobed.

SYN. *Stellaria holosteaa*. *Linn. Sp. Pl.* 603. *Huds.* 190. *With.* 417. *Relb.* 170. *Sibth.* 140. *Curt. Lond. fasc.* 2. t. 30. *Dicks. H. Sicc. fasc.* 7. 6.

Caryophyllus holosteus arvensis glaber flore majore.
Raii Syn. 346.

VERY frequent in groves and about dry hedge bottoms, where its brilliant white starry blossoms render it conspicuous in the spring. The herb has so much of a grassy appearance, that old botanists have named it the white-flowering grass.

Root perennial, creeping, small. Stems at their base decumbent, slender and very delicate, then upright, supporting







STELLARIA graminea.

Lesser Stitchwort,

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, deeply cloven, *Caps.* superior, of 1 cell, with 6 teeth at the orifice. *Seeds* numerous.

SPEC. CHAR. Leaves linear-lanceolate, entire. Panicle terminal, spreading. Calyx three-nerved, about equal to the petals.

SYN. *Stellaria graminea.* *Linn. Sp. Pl.* 604. *Sm. Fl. Brit.* 475. *Huds.* 190. *With.* 419. *Hull.* 97. *Relb.* 170. *Sibth.* 140. *Abbot.* 96.

Caryophyllus holosteus arvensis glaber, flore minore,
Raii Syn. 346.

THE white starry blossoms of this delicate plant prettily bespangle furze-bushes, heath, and low broom, on a gravelly or sandy soil; and its herbage being concealed by the bushes or grass, and the stalks of the panicle very slender, the flowers



STELLARIA glauca.
Glaucous Marsh Stitchwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, deeply cloven. *Capsf.* superior, of 1 cell, with 6 teeth at the orifice. *Seeds* numerous.

SPEC. CHAR. Leaves linear-lanceolate, entire, glaucous. Flower-stalks erect. Calyx three-nerved, shorter than the petals.

SYN. *Stellaria glauca.* *Willd.* 420. *Sm. Fl. Brit.* 475. *Sym. Syn.* 108. *Hull.* 97.

S. media. *Sibth.* 141. *Abbot.* 96.

S. graminea β . *Huds.* 190.

Caryophyllus holosteus arvensis medius. *Raii Syn.* 347.

ALTHOUGH it may be difficult to draw up a very striking specific character between this plant and the *S. graminea* represented in t. 803, there can be no question of their being perfectly distinct species. The present is found only in moist meadows, or about ditches. Its glaucous colour, perfect



Dianthus barbatus L. f. *barbatus* L.

[1074]

STELLARIA uliginosa,
Bog Stitchwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, deeply cloven. *Capsf.* superior, of 1 cell, with 6 teeth at the orifice. *Seeds* numerous.

SPEC. CHAR. Leaves elliptic-lanceolate, entire, with a callous tip. Flowers irregularly panicled, lateral. Petals shorter than the calyx.


SYN. *Stellaria uliginosa.* *Sm. Fl. Brit.* 476. *Curt. Lond. fasc.* 6. *t.* 28. *With.* 420. *Hull.* 97. *Sibth.* 141. *Abbot.* 96.

S. graminea γ. *Huds.* 190. *Linn. Fl. Succ.* 150. *Relb.* 170. *ed.* 2. 171.

Alfinc longifolia, uliginosis proveniens locis. *Rail Syn.* 347.

FREQUENT in rivulets, and clear brooks or ditches by road sides, flowering plentifully in June.

The root is annual, small and fibrous. Herb weak and slender, smooth, of a pale somewhat glaucous green. Stems branched, quadrangular, leafy. Leaves rather elliptical, furnished with many parallel veins, entire, but waved in the margin, tipped with a small callous point. Flower-stalks









STELLARIA scapigera.

Many-stalked Stitchwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, deeply cloven. *Caps.* superior, of 1 cell, with 6 teeth at the orifice. *Seeds* numerous.

SPEC. CHAR. Stem shorter than the flower-stalks. Leaves linear-lanceolate, rough-edged. Calyx three-nerved, the length of the petals.

SYN. *Stellaria scapigera.* Willden. *Sp. Pl.* v. 2. 716.

WILD specimens of this new and curious *Stellaria* have been obligingly communicated to us by Mr. G. Donn, who gathered them at different times, from the year 1794 to 1803, on the sides of rivulets in Perthshire, and about Loch Nevis, Invernesshire. The plant was received by the younger Linnaeus from the Kew garden with the apt name of *scapigera*, but does not appear in the *Hortus Kewensis* of Mr. Aiton. A specimen having come to the hands of Professor Willdenow, he has described it in his *Sp. Pl.*, but its native country was altogether unknown till Mr. Donn's fortunate discovery.

1269



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1269

Epilobium ciliatum (L.) Rostk Schmidt

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[911]

STELLARIA cerasroides.

Alpine Stitchwort.

DECANDRIA Trigynia:

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, deeply cloven. *Caps.* superior, of 1 cell, with 6 teeth at the orifice. *Seeds* numerous.

SPEC. CHAR. Leaves elliptic-oblong, bluntish. Stems generally two-flowered, marked with a hairy longitudinal line. Calyx-leaves with a single nerve, downy.

SYN. *Stellaria cerasroides.* *Linn. Sp. Pl.* 604. *Sm. Fl. Brit.* 477. *Pl. Ic. t.* 15. *Dicks. Tr. of Linn. Soc. v.* 2. 290. *H. Sicc. fasc.* 2. 11. *With.* 421. *Hull.* 97. *Fl. Dan. t.* 92.

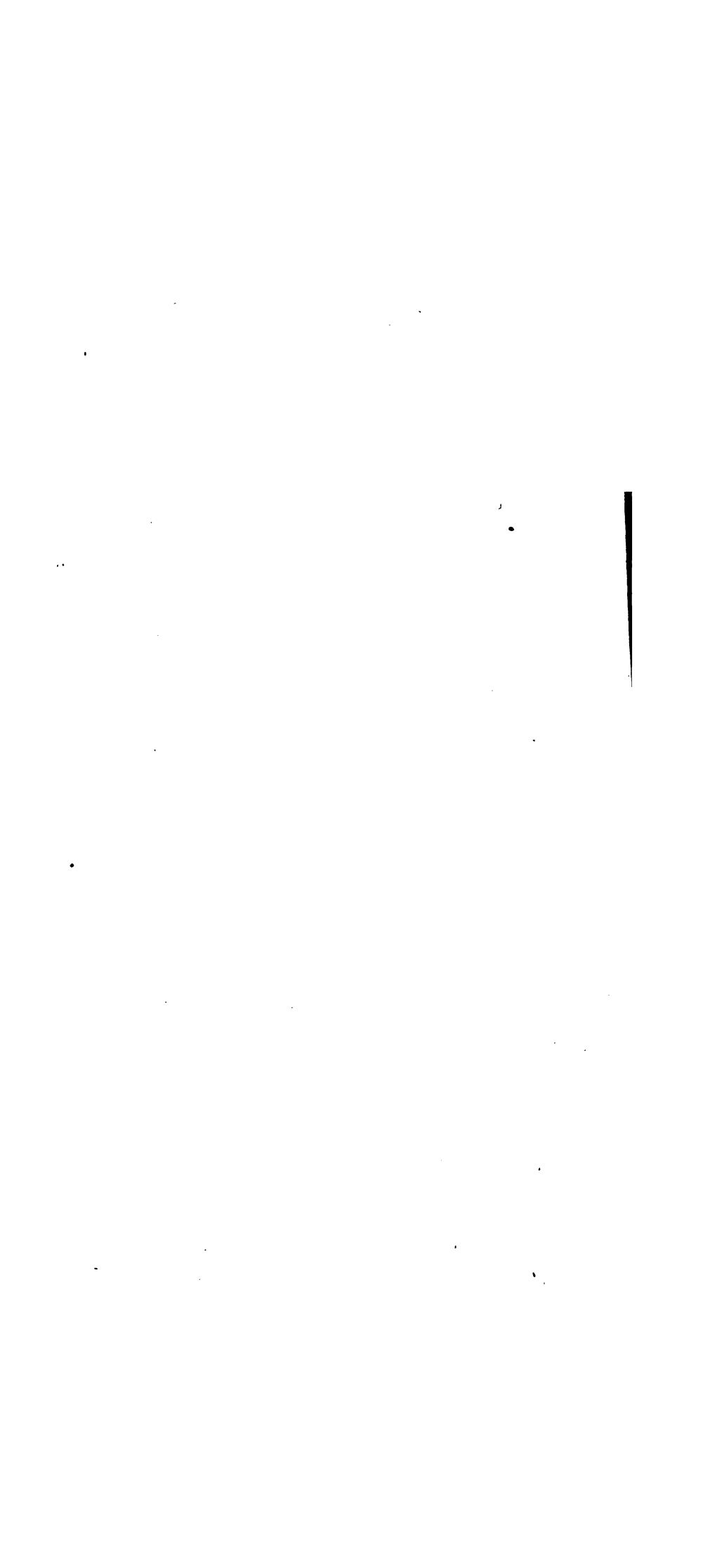
AN uncoloured plate of this plant was given in the first fasciculus of my *Plantarum Icones* in 1789, because I had then no idea of its being any where figured, and few botanists appeared to know it. Linnæus himself after publishing an excellent description in *Fl. Suec. n.* 394, confounded many other things with it. Mr. Dickson first made it known as a British native. Our wild specimens were gathered on Ben Nevis, and mountains to the north of Invercauld, by Mr. J. Mackay.

911.



Chrysanthemum pulchellum, DC. et L.





ARENARIA peploides,

Sea Chickweed.

DECANDRIA Trigynia.


GEN. CHAR. *Cal.* five-leaved, spreading; *Petals*
five, undivided. *Capf.* of one cell, with many
seeds.

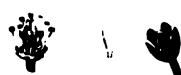
SPEC. CHAR. Leaves ovate, acute, fleshy.

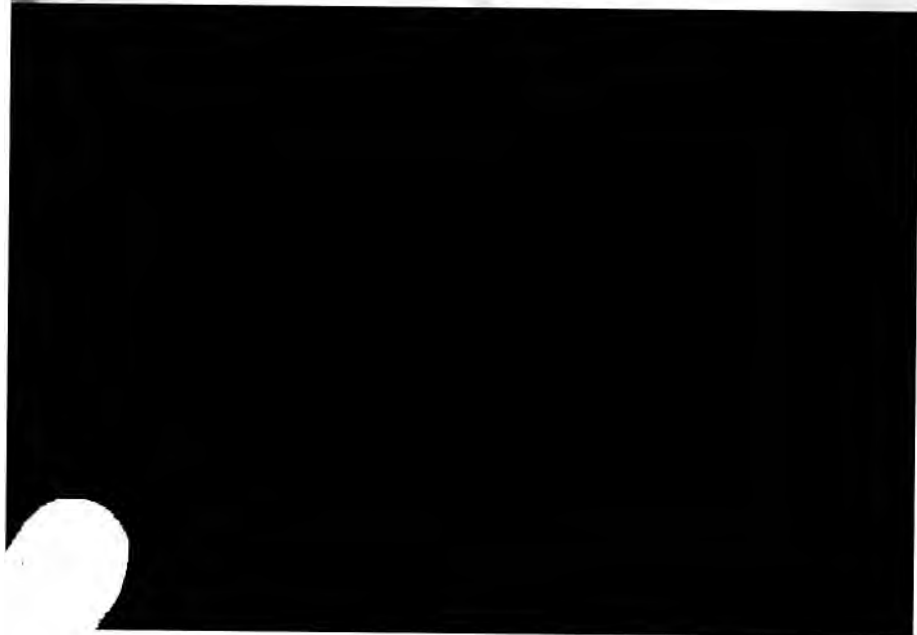
SYN. *Arenaria peploides.* *Linn. Sp. Pl.* 605. *Huds.*
Fl. An. 191. *Witb. Bot. Arr.* 458.

Alfne marina, foliis Portulacæ. *Raii Syn.* 351.

PECULIAR to the sandy shores of the sea, but there found
in abundance. Its juices partake of the alkaline nature of other
succulent maritime plants.







ARENARIA trinervis.
Plantain-leaved Sandwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, undivided. Capsule superior, of 1 cell, with many seeds.

SPEC. CHAR. Leaves ovate, acute, stalked, ribbed. Keel of the calyx-leaves rough, with three obscure ribs.

SYN. *Arenaria trinervis*. *Linn. Sp. Pl.* 605. *Sm. Fl. Brit.* 478. *Huds.* 191. *With.* 421. *Hull.* 95. *Relh.* 171. *Sibth.* 141. *Abbot.* 97. *Curt. Lond. fasc.* 4. *t.* 31.

Alsine plantaginis folio. *Raii Syn.* 349.

INCURIOUS observers may pass by this little plant as a variety of the common *Stellaria media*, to which it bears some resemblance in general aspect; but its paler hue, and uniform downiness, readily distinguish it. When examined more carefully, the undivided petals and the 3-ribbed leaves mark it decisively.

It grows in shady bushy places, for the most part on a rather moist but not boggy soil. It is also partial to calcareous ground, and flowers in May and June.

Root annual. Stems upright, but weak, and trusting to other plants for support, much branched, spreading, round, downy all over. Leaves on footstalks, opposite, ovate, acute, entire, ciliated, marked with 3, rarely 5, evident ribs. Flowers small, white, on longish solitary stalks, each proceeding from a fork of the stem. Calyx longer than the petals, acute, each leaf with 3 obsolete ribs, and downy at the back. Capsule opening with 6 revolute teeth. Seeds black and smooth.





ARENARIA serpyllifolia.

Thyme-leaved Sandwort.

DECANDRIA Trigynia:

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, undivided. *Caps.* superior, of 1 cell, with many seeds.

SPEC. CHAR. Leaves ovate, nearly sessile, rough. Calyx hairy, its outer leaves five-ribbed.

SYN. *Arenaria serpyllifolia.* *Linn. Sp. Pl.* 606. *Sm. Fl. Brit.* 479. *Huds.* 191. *With.* 421. *Hull.* 95. *Relb.* 171. *Sibth.* 142. *Abbot.* 97. *Curt. Lond. fasc.* 4. t. 32. *Dicks. H. Sicc. fasc.* 16. 3.

Alfina minor multicaulis. *Raii Syn.* 349.

COMMON on walls and in barren waste places, flowering from May to the middle of July.

The root is small, fibrous, annual. Stems several, 3 or 4 inches high, spreading, a little branched, leafy, rigid, round, downy, forked upwards, set with several pairs of opposite, small, ovate, entire, thyme-like leaves, which are roughish on both sides, and slightly ribbed. Flower-stalks always erect. Leaves



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A R E N A R I A rubra.

Purple Sandwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, undivided. *Capsule* superior, of 1 cell, with many seeds.

SPEC. CHAR. Leaves linear, tipped with a small bristle. Stipulæ membranous, sheathing. Seeds compressed, angular, roughish.

SYN. *Arenaria rubra.* *Lim. Sp. Pl.* 606. *Sm. Fl. Brit.* 479. *Huds.* 192. *With.* 422. *Hull.* 96. *Relb.* 172. *Sibth.* 142. *Abbot.* 98.

Spergula purpurea. *Raii Syn.* 351.

THIS species of *Arenaria* is one of the most common in dry sandy fields, spreading widely on the ground, and flowering in July and August; but the blossoms expand only in bright weather, when their beauty and brilliancy will be found worthy of an accurate examination.

Root small, spindle-shaped, branched, annual. Stems prostrate, branched, spreading in a circular form, flaccid, leafy, round, smooth, a little tumid at their joints. Leaves flat,

linear, narrow, pointed, entire, tipped with a small bristle. Glan-



ARENARIA marina.

Sea Spurrey-Sandwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, undivided. *Capsule* superior, of 1 cell, with many seeds.

SPEC. CHAR. Leaves semicylindrical, fleshy, awnless. *Stipulæ* membranous, sheathing. *Seeds* compressed, bordered, smooth.

SYN. *Arenaria marina.* *Fl. Dan. t.* 740. *Sm. Fl. Brit.* 480. *Hull.* 95.

A. rubra β. *Linn. Sp. Pl.* 606. *Lightf.* 230. *Hulf.* 193, (media).

A. media. *With.* 422.

Spergula maritima, flore parvo cæruleo, semine vario. *Dill. in Raii Syn.* 351.

3. *Arenaria media.* *Sp. Pl.* 606, the synonyms wrong.

A. marina. *With.* 422. *Relb.* 172.

A. rubra γ, (marina). *Hulf.* 193.

Alfina Spergulæ facie media. *Raii Syn.* 351.

COMMON on most parts of the British coast, flowering from June to August.

The root is spindle-shaped and strong, though annual.

548





ARENARIA tenuifolia.

Fine-leaved Sandwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, undivided. *Capsf.* of one cell, with many seeds.

SPEC. CHAR. Leaves awl-shaped. Stem panicled. Capsules erect. Petals lanceolate, shorter than the calyx.

SYN. *Arenaria tenuifolia.* *Linn. Sp. Pl.* 607. *Huds. Fl. An.* 192. *With. Bot. Arr.* 461. *Relb. Cant.* 172. *Sibth. Oxon.* 142.

Alfine tenuifolia. *Raii Syn.* 350.

SENT by the Rev. Mr. Hemsted from the neighbourhood of Newmarket, where it grows in dry sandy fields, on walls, &c. contenting itself with very spare nourishment, though not succulent so as to resist much drought. Accordingly it flowers early in summer, and is soon entirely dried up. Its seeds pro-









ARENARIA verna.

Vernal Sandwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, undivided. *Capsf.* of 1 cell, with many seeds.

SPEC. CHAR. Leaves awl-shaped, bluntish. Stem paniced. Petals longer than the calyx, obovate. Calyx with three remote equal ribs.

SYN. *Arenaria verna.* *Linn. Mant.* 72. *Huds.* 191. *With.* 423. *Lightf.* 231. *Dicks. Dr. Pl.* 6. *Hort. Sicc. fasc.* 13. 17.

Alfine pusilla, pulchro flore, folio tenuissimo nostras. *Raii Syn.* 350.

THIS *Arenaria* grows plentifully on Arthur's seat near Edinburgh, but is most abundant about the lead mines of Derbyshire, on the soil thrown out of the mines, which scarcely nourishes any other plant. From thence our specimens were taken. We have received others from Wales and Durham, by favour of Mr. Griffith and Mr. Robson. It is perennial, begins flowering in May, and lasts above three months.

The root is very long and strong, descending perpendicularly, and branching below. Stems extremely numerous, branched, forming a thick spreading tuft, round, thickly clothed with opposite leaves, and terminating in upright panicles. Leaves narrow, awl-shaped but blunt, three-nerved, connate at their base. Bractææ ovate, sharp pointed, three-nerved, concave, broader, but much shorter, than the leaves. Flower-stalks growing in a paniced manner, but not regularly forked; each is single-flowered, erect, with a pair of bractææ at its base. Calyx-leaves ovate, acute, with a broad whitish membranous border, and marked with three equal prominent ribs, which are more remote from each other than in some species. Petals longer than the calyx, obovate. Antheræ reddish. Capsule cylindrical. The whole herb, more especially the stem, is sometimes clothed with short viscid pubescence, but the leaves are mostly smooth. The *Arenaria* figured in Gerard, *Flo. Gallopr.* t. 15. f. 1. is the *recurva* of Allioni, not hitherto found in England, any more than the true *juniperina* and *laricifolia*.



Plantago lanceolata L.

[1744]

A R E N A R I A fastigiata.

*Level-topped Sandwort.**DECANDRIA Trigynia.*

GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, undivided. *Capsule* superior, of 1 cell, with many seeds.

SPEC. CHAR. Stem erect, straight. Flowers crowded. Leaves awl-shaped. Petals very short. Lateral ribs of the calyx dilated.

SYN. *Arenaria fasciculata.* *Jacq. Austr. v. 2. 49. t. 182.*
Don. Herb. Brit. fasc. 6. 136.

Stellaria rubra. *Scop. Carn. ed. 2. n. 538. t. 17.*

Alsine n. 870. *Hall. Hist. v. 1. 384. t. 17. f. 2.*

MR. GEORGE DON had the good fortune to discover this new British plant on rocks in the mountains of Clova, Angusshire, and also in Fifeshire. He rightly referred it to Jacquin's *A. fasciculata*, not having the means of knowing that the plant of Linnæus and Gouan is a very distinct species, distinguished by the long unequal leaves of its calyx, and other marks, as appears by the authentic Linnæan specimen and Gouan's description. Both plants are very distinct from *Alsine mucronata*. The name we have chosen is peculiarly expressive of the habit of the plant when ripening seed. To





[1745]

ARENARIA ciliata.

Fringed Sandwort.

DECANDRIA Trigynia.

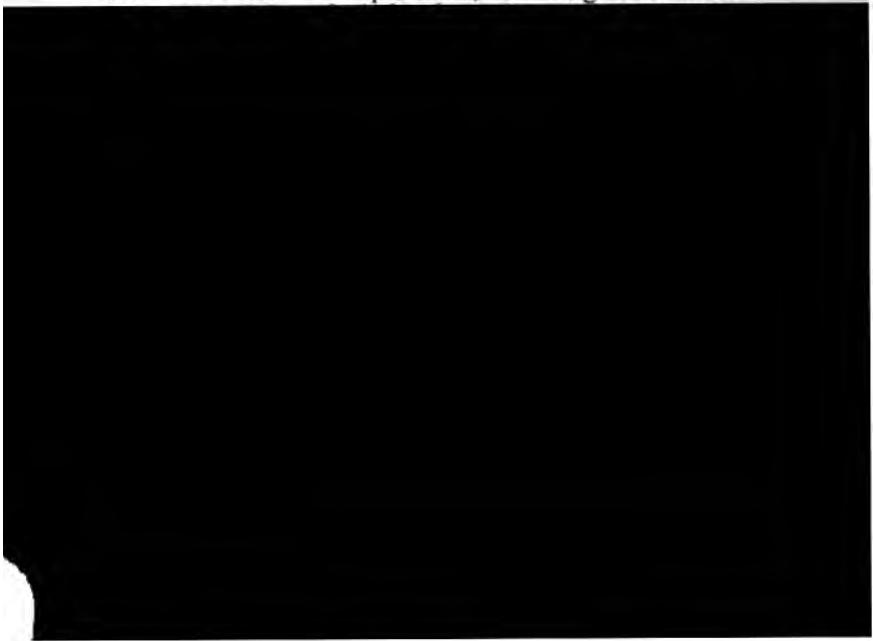
GEN. CHAR. *Cal.* 5-leaved, spreading. *Petals* 5, undivided. *Capsule* superior, of 1 cell, with many seeds.

SPEC. CHAR. Stems numerous, much-branched, downy. Flower terminal, solitary. Leaves spatulate, roughish, fringed at the base. Calyx-leaves with five or seven ribs.

SYN. *Arenaria ciliata.* *Linn. Sp. Pl.* 608. *Wulf. in Jacq. Coll.* v. 1. 245. t. 16. f. 2. *Fl. Dan.* t. 346. *Alsine serpilli folio, multicaulis et multiflora.* *Segu. Veron.* v. 1. 420. t. 5. f. 2.

A. n. 876. *Hall. Hist.* v. 1. 386. t. 17. f. 3.

THIS new addition to our Flora was discovered in September 1806 by Mr. J. T. Mackay, on the calcareous cliffs of a high mountain adjoining to Ben Bulbin, in the county of Sligo, Ireland. Though found in Iceland, and very abundantly in Switzerland, France, &c., it had never before been seen in the British isles. It is perennial, flowering in autumn.



1745



Stachys recta L.



CHERLERIA sedoides.

Dwarf Cherleria.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* of 5 leaves. *Petals* none? *Neotarififerous glands* 5, cloven, at the base of the stamina. *Capsule* superior, with 3 valves, 1 cell, and many seeds.

SPEC. CHAR.

SYN. *Cherleria sedoides*. *Linn. Sp. Pl.* 608. *Sm. Fl. Brit.* 483. *Huds.* 193. *With.* 424. *Hull.* 98. *Lightf.* 232. *Dicks. H. Sicc. fasc.* 1. 9.

Cherleria. *Hall. Hist. v.* 1. 381. *t.* 21. *Sequier. Veron. suppl.* 180. *t.* 4. *f.* 3.

RAY and Dillenius were not acquainted with this little plant as of British growth, though described from exotic specimens by Plukenet, and others of his time. The first correct accounts of it were given by Haller and Sequier, and it was afterwards discovered in Scotland by some of Dr. Hope's travelling pupils. It is only found about the summits of the highland mountains, in boggy spots, flowering in July, and is





COTYLEDON Umbilicus.

*Common Navel-wort.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* five-cleft. *Cor.* of one petal.
Nectary of five scales at the base of the germen.
Capsules five.

SPEC. CHAR. Leaves peltate, scolloped. Stem spiked,
 rarely branched. Flowers pendulous. Bractes
 entire.

SYN. *Cotyledon Umbilicus.* *Linn. Sp. Pl.* 615. *Huds.*
Fl. An. 194. *With. Bot. Arr.* 463. *Sibth. Ox.* 143.
C. vera, radice tuberosa. *Raii Syn.* 271.

FOR this wild specimen, gathered on walls at Peterborough, we are indebted to the Rev. Mr. Hemsted. The plant is most frequent in the west of England and Wales, growing on moist rocks. In Gerarde's time it grew over the door of Poet's Corner, Wesminster Abbey, but was not to be found there when his second edition was published. It flowers in June, and lasts through July.

Root perennial, tuberous. Stem round, very succulent (as are also the leaves), purplish, erect, terminating in a simple or branched spike of numerous, drooping, pale-yellow flowers. Leaves smooth, mostly peltate, on longish foot-stalks, more or less deeply and acutely crenate, those on the stem becoming less peltate and more deeply notched the higher they are situated, and at length changed for small, lanceolate, entire bractes. Corolla cylindrical, the margin in five small erect segments. Antheræ on very short filaments, inserted in two rows just within the orifice of the corolla, and not projecting beyond its margin.

Though this be the variety β of Linnæus, yet being by far more common than his α , we think it best to retain it as the true *C. Umbilicus*, as all authors have done. If the α (Mr. Hudson's *lutea*) be really distinct, we shall take some other opportunity of describing it.





COTYLEDON lutea.
Greater Yellow Navelwort.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* five-cleft. *Cor.* of one petal.
Nectary of five scales at the base of the germen.
Capsules five.

SPEC. CHAR. Leaves deeply crenate or toothed; the
lowermost somewhat peltate. Stem spicate, mostly
simple. Flowers erect. Root creeping.

SYN. *Cotyledon lutea.* *Huds.* 194. *Sm. Fl. Brit.* 484.
With. 426. *Hull.* 99.

C. Umbilicus. *Linn. Sp. Pl.* 615, α .

C. flore luteo, radice tuberosâ repente. *Dodart.*
Mem. 73, with a figure.

OUR knowledge of this fine plant as growing in Britain is entirely owing to Mr. Hudson. He gives it as a native of walls and moist stony places in the west riding of Yorkshire, on the authority of his friend Tofield, adding that he himself saw it in the garden of a Mr. Clement who received it from Somersetshire. Plants communicated by Mr. Hudson to Chelsea Garden have flourished and increased there, and from one of them our figure was taken in July last.

The root is perennial, fleshy and creeping. Stem a foot or more in height, sometimes branched. Lower leaves only peltate; the rest obovate, scattered, on short stalks, deeply crenate or toothed, succulent, smooth. Flowers very numerous in a dense, upright, cylindrical spike, all nearly erect, on short stalks. Corolla and stamina bright yellow. Nectaries lunate. Bractæ entire or toothed.

It is remarkable that Linnæus should have made this the α , or primary species, of his *C. Umbilicus*, whereas the most common kind, with really umbilicated leaves, and so called by all authors besides, alone deserves the name. See our *vol. 5. t. 325.*

2122



Scilla elaeagnifolia (L.) D. Don

1

1



SEDUM Telephium.

Orpine.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous scales at the base of the *germen*. **Capsules* 5, superior.

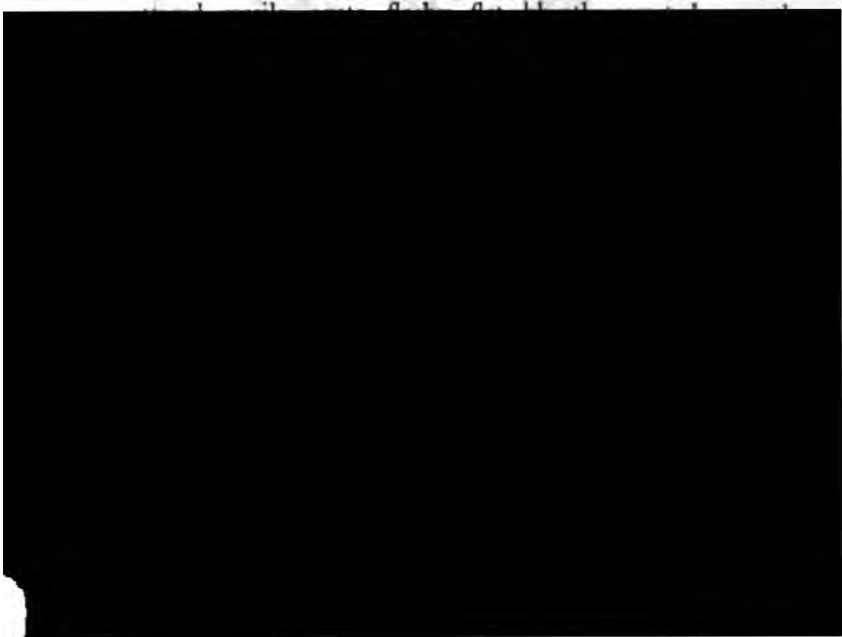
SPEC. CHAR. Leaves flattish, serrated. Corymbus leafy. Stem erect.

SYN. *Sedum Telephium*. *Linn. Sp. Pl.* 616. *Sm. Fl. Brit.* 485. *Huds.* 195. *With.* 426. *Hull.* 99. *Relh.* 173. *Sibth.* 143. *Abbot.* 98. *Curt. Lond. fasc.* 3. *t.* 25.

Anacampseros, vulgò *Faba crassa*. *Raii Syn.* 269.

FOUND in the borders of fields, about hedges, bushy hills, and such kinds of situations, on a gravelly or calcareous soil, flowering in August.

The root is perennial, consisting of several oblong, tapering, fleshy, white lumps, with fibres at their extremity. Stems between one and two feet high, erect, simple, very leafy, round, smooth, generally spotted with purple. Leaves irregularly





1



S E D U M dasphyllum.

Thick-leaved Stonecrop.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous scales at the base of the germen. *Capsules* 5.

SPEC. CHAR. Leaves opposite, ovate, obtuse, fleshy. Stem weak. Panicle glutinous.

SYN. *Sedum dasphyllum.* *Linn. Sp. Pl.* 618. *Huds.* 197. *With.* 428. *Hull.* 99. *Relb.* 179. *Sibtb.* 144. *Abbot.* 98. *Curt. Lond. fasc.* 3. t. 26.

S. minus circinato folio. *Dill. in Raii Syn.* 271.

THIS pretty little *Sedum* was pointed out to us at Clifton, near Bristol, by Mr. Dyer. It grows on walls or rocks, and is often to be seen about London, as at Hammermith, Kew and Chelsea. When once introduced into a garden it propagates itself freely upon walls, waste places, and about garden-pots.

We believe it to be perennial, though it so frequently dis-



... ..

■



SEDUM anglicum.

English Stone-crop.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous scales at the base of the germen. *Capsules* 5.

SPEC. CHAR. Leaves thick, ovate, gibbous and loose at the base, alternate. Cyme of two branches.

SYN. *Sedum anglicum.* *Huds. Fl. An.* 196. *Wub. Bot. Arr.* 468.

S. rubens. *Lightf. Fl. Sc.* 235.

S. minimum non acre, flore albo. *Raii Syn.* 270.

l. 12. f. 2.

COMMUNICATED by Dawson Turner, Esq. from the sandy downs near Yarmouth, where it is very abundant, as well as on the mountains of the north. Dr. Smith gathered it in Westmoreland, and on the rock of Dumbarton-castle in Scotland.

The root is generally supposed to be annual, throwing out many stems, branched and decumbent at their base, then upright and more simple, round, reddish, clothed with alternate rather thick-set leaves, and terminated by small bifid or trifid cymes of flowers. The leaves are very thick and succulent, oval, glaucous, with a blunt protuberance at their base, below their attachment to the stem. The flowers are at first thickly clustered together; but as the cyme expands, they appear more remote, one always standing at the first divarication of the cyme. The calyx resembles the leaves, and is obtuse. The petals have a reddish rib, and are often spotted with the same colour at their tip. The capsules are membranous and smooth.

This species has cost us no small trouble to determine accurately. Of the plants which approach it, *Sedum annuum* of Linnæus has a yellow flower, and much shorter and broader leaves. *S. atratum* has leaves like *S. annuum*, and very blunt purple capsules, with red and white petals. *Crassula rubens* has a sharper calyx than our plant, and rough, spreading, strong (not membranous) capsules. Mr. Hudson and Mr. Lightfoot were therefore right in making this a species distinct from all those of Linnæus.



Pandanus Ait. 1794



S E D U M acre.

*Biting Stone-crop.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectari-
ferous scales at the base of the germen. *Capsules* 5.

SPEC. CHAR. Leaves alternate, somewhat ovate,
fleshy, gibbous, fixed to the stem by their inner
side above the base. Cyme three-cleft, leafy.

SYN. *Sedum acre.* *Lin. Sp. Pl.* 619. *Sm. Fl. Brit.* 487.
Huds. 196. *With.* 427. *Hull.* 99. *Relb.* 174.
Sibth. 144. *Abbot.* 99. *Curt. Lond. fasc.* 1. t. 32.
Woodv. Suppl. t. 231.

S. parvum acre, flore luteo. *Raii Syn.* 270.

THIS brilliant little flower is conspicuous enough about midsummer, and for some time afterwards, on walls, roofs, and dry barren or sandy ground, which it clothes as it were with a cloth of gold, in defiance of the drought and most scorching sun.

The small fibrous roots are perennial, and spring from the lower part of the twisted and intricate stems, which become





[1946]

SEDUM sexangulare.

*Inspid Stonecrop.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous scales at the base of the germen. *Cap-sules* 5, superior.

SPEC. CHAR. Leaves in six or seven rows, somewhat cylindrical, obtuse, fleshy, spreading, fixed to the stem by their inner side above the base. Cyme three-cleft, leafy.

SYN. *Sedum sexangulare.* *Linn. Sp. Pl.* 620. *Sm. Fl. Brit.* 488. *Huds. ed.* 1. 171. *With.* 428. *Hull.* 99. *Relh.* 174. *Curt. Lond. fasc.* 4. t. 33. *S. acre* β. *Huds.* 196.

IT cannot but excite wonder that any systematic botanist should confound this with *Sedum acre*, t. 839. Mr. Curtis has given the first figure of the plant before us, (Lobel's *Ik.* 379. f. 1, being too unlike and uncertain to be relied on,) having gathered it on Greenwich park wall near the south-west corner. It was found in several parts of Kent by Mr. Hudson, and in Cambridgeshire by Mr. Relhan. Our specimen was brought by Mr. Turner from the famous rotten walls of Old Sarum, and blossomed in a garden about the end of July, being 2 or 3 weeks later than the *acre*.

It differs moreover in being, though unpleasantly austere, destitute of all acrid pungency of flavour, but especially in the form and disposition of its leaves, which are pretty accurately cylindrical, by no means ovate, and stand 3 or 4 together in alternate whorls, so as to spread 6 or 7 different ways, producing in the whole leafy stem or branch 6 or 7 angles or rows. The cymes are terminal, of 2 larger branches and a small one. Flowers yellow, much like those of *S. acre*, or rather paler. The foliage of the plant often turns red.

1946



Not to be published by the Government without the



S E D U M villosum.

Hairy Stonecrop.

DECANDRIA Pentagynia.


GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with five nectariferous scales at the base of the germen. *Capsules* 5.

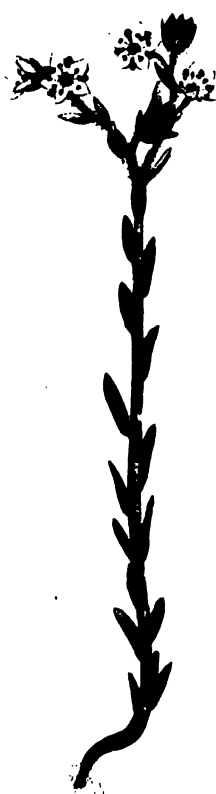
SPEC. CHAR. Stem erect. Leaves flattish, slightly hairy, as well as the flower-stalks.

SYN. *Sedum villosum.* *Linn. Sp. Pl.* 620. *Huds. Fl. An.* 197. *With. Bot. Arr.* 469.

S. purpureum pratense. *Raii Syn.* 270.

THIS is one of those rare north-country plants which we should have no chance of procuring, but for the kind assistance of our friends. We are indebted for it to the same gentlemen who sent *Bartsia alpina*, see t. 361. *S. villosum* grows in bogs and moist meadows near rivulets in Westmoreland, Durham, and the north-west part of Yorkshire, more frequent







SEDUM album.

White Stonecrop.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous scales at the base of the germen. *Capsules* 5.

SPEC. CHAR. Leaves oblong, cylindrical, obtuse, spreading, smooth. Panicle much branched.

SYN. *Sedum album.* Linn. *Sp. Pl.* 619. Sm. *Fl. Brit.* 489. Huds. 196. With. 427. Hull. 99. Relh. 174. Abbot. 99. Curt. *Lond. fasc.* 1. t. 31. *S. minus teretifolium album.* Raii *Syn.* 271.

ON walls about London in several places, also in some other parts of England either on walls or rocks, flowering in July, but it is not frequent.

Root fibrous, perennial. Stems 4 or 5 inches high, branched and weak at the bottom, round, leafy, smooth, often reddish. Leaves scattered, spreading, sessile, cylindrical, obtuse, smooth, extremely juicy, of a pale green inclining to glaucous, often tinged with red. Panicle cymose, terminal, much branched, smooth. Flowers white or pale red. Calyx obtuse, smooth. Antheras red. Nectariferous scales slightly notched.

For decorating ruins or rockwork this is a lively delicate-looking *Sedum*, but it is not one of those that thrive indiscriminately and without trouble in any situation. It requires some depth of soil, and a little support for its stems, which in such circumstances throw out roots and creep to some extent. It also likes a little moisture and shade.



March & Hall. Engraved by J. C. Sowerby, London.

S E D U M reflexum.

*Yellow Stone-crop.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectari-
ferous scales at the base of the germen. *Cap-*
sules 5.

SPEC. CHAR. Leaves awl-shaped, scattered, loosened
at the base; the lowermost recurved. Flowers
somewhat cymose.

SYN. *Sedum reflexum.* *Lin.* *Sp. Pl.* 618. *Sm.*
Fl. Brit. 490. *Huds.* 195. *With.* 429. *Hull.*
100. *Relb.* 173. *Sibth.* 144. *Abbot.* 99.

S. minus, luteum, ramulis reflexis. *Raii Syn.* 270. and
S. minus hæmatoides. *Raii Syn.* 269.

COMMON on walls and thatched roofs, flowering in
July. The roots are perennial, consisting of simple fibres that
spring from the lower parts of the round, fleshy, variously
spreading, entangled or pendent stems. The leaves are irre-



[2477]

SEDUM glaucum.

*Glaucous Stone-crop.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous scales at the base of the germen. *Capsules* 5.

SPEC. CHAR. Leaves glaucous, awlshaped, scattered, loosened at the base; those of the branches thread-shaped. Flowers in a cyme. Segments of the calyx lanceolate.

SYN. *Sedum glaucum.* *Donn. Cant. ed.* 5. 112.

S. reflexum β. *Sm. Fl. Brit.* 490.

S. minus hæmatoides. *Ger. em.* 512. *Raii Syn.* 269.

FOUND by F. K. Eagle, Esq. near Mildenhall, Suffolk; on the southern sides of some small rough hills, most indubitably wild, flowering in July or August. We received specimens through the hands of E. Forster, Esq., who suggests that this is probably what Mr. Haworth, in a late work on Succulent Plants, has marked as the larger variety of *S. glaucum*, the smaller one being more compact, erect, and shorter, in its branches. This last we have not seen, but it is said to be cultivated in some gardens.

The *Sedum* before us differs from *S. reflexum*, t. 695, in its more glaucous hue, and more slender leaves, especially those of the branches. We presume it to be the plant of Gerarde, from his figure and description; but whether it be, as the old authors say, usually intermixed with the *reflexum* upon walls; or whether they, as we have always supposed, distinguished as species or varieties the two different stages of growth of that plant, differing only in the posture of the flowers, we are by no means certain. There can however be no doubt of the distinction between our *glaucum* and *reflexum*.



Senecio, collected by J. L. S. S. S. S.



[1802]

S E D U M Forsterianum.

Forsterian Stonecrop.


DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous scales at the base of the germen. *Capsules* 5, superior.

SPEC. CHAR. Leaves thick, awlshaped, clustered together in many rows, spreading, loose at the base. Flowers in a cyme. Segments of the calyx short and rounded.

GATHERED in 1806, by E. Forster junior, Esq., on a rock at the fall of the Rhydoll, near the Devil's-bridge, Cardiganshire. The root brought from thence flowered this year, in the month of July, in Mr. Forster's garden, to whom we are obliged for specimens, as well as for the detection of this new species, hitherto confounded with *S. rupestre*, t. 170.

Mr. Griffith, having never found the latter in Wales, suggests





Veronica filiformis L. f. *Sp. Pl.* 1000. *London.*



SEDUM rupestre.

*Rock Stone-crop.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectari-
ferous scales at the base of the germen. *Cap-*
sules 5.

SPEC. CHAR. Leaves thick, subulate, clustered toge-
ther in a five-fold order, and loose at the base.
Flowers in a cyme.

SYN. *Sedum rupestre.* *Linn. Sp. Pl.* 618. *Huds.*
Fl. An. 195. *Witb. Bot. Arr.* 466.

S. minus a rupe S. Vincentii. Raii Syn. 270.

ORIGINALLY observed on St. Vincent's rocks near Bristol hot-wells, and afterwards on Chedder rocks by Dillenius, and on a hill in Wales. Mr. Robson found it on walls about Darlington, from whence he sent us this wild specimen, flowering in July 1792.

The roots are perennial, branched, and throw out many long decumbent stems, which are round, red and naked in their lower part, taking root in many places; above they are alternately branched, terminating in thick club-shaped tufts of leaves, closely imbricated. The flowering stems are more upright, a foot high, clothed with more scattered leaves, and terminated by a large handsome cyme of yellow flowers. The calyx is very glaucous, often tipped with red. Flowers often in 6 or 7 parts instead of 5. All the leaves are glaucous, thick and succulent, subulate, unconnected with the stem at their base, which is like a little blunt spur; they are more compressed, and much more closely imbricated than in *S. reflexum*, neither are they ever recurved as in that species.

Dillenius first well ascertained this plant in his *Hortus Elthamensis*, where he has given a good figure of it, *tab.* 256, *f.* 333.

Flora Danica, *tab.* 59, is a very different plant, the *Sedum saxatile* of Wiggers, *Fla. Holsat.* 35.



P. hancei (H. & A.) 1894



OXALIS Acetosella.

*Common Wood-Sorrel.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, connected by their claws. *Capf.* superior, of 5 cells, 5-fided, bursting at the angles. *Seeds* clothed with an elastic tunic.

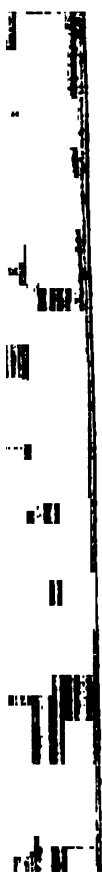
SPEC. CHAR. Stalk single-flowered. Leaves ternate, inversely heart-shaped, hairy. Root of scaly joints.

SYN. *Oxalis Acetosella.* *Linn. Sp. Pl.* 620. *Sm. Fl. Brit.* 491. *Huds.* 198. *Witb.* 430. *Hull.* 100. *Relb.* 176. *Sibth.* 144. *Abbot.* 100. *Curt. Lond. fasc.* 2. *t.* 31. *Woodv. Med. Bot. t.* 20.

Oxys alba. *Raii Syn.* * 281.

GROVES and thickets in the spring abound with this pretty plant, whose delicate drooping blossoms do not indeed obtrude themselves upon the notice of every passenger, being generally shaded by bushes, or concealed by the herbage of other plants; but when observed they cannot fail to be admired, especially if contrasted with the bright verdure of their proper foliage. They are produced in April or May. Later in the summer the capsules are found darting forth their little shining seeds on the slightest touch, by means of the elastic *arillus* that contains them.





[1726]

OXALIS corniculata.

*Yellow Procumbent Wood-Sorrel.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, connected by their claws. *Caps.* superior, of 5 cells, 5-sided, bursting at the angles. *Seeds* clothed with an elastic tunic.

SPEC. CHAR. Stem branched, spreading on the ground. Flowers in small umbels. Footstalks with stipulas at their base.

SYN. *Oxalis corniculata.* *Linn. Sp. Pl.* 623. *Berk. Syn. v. 2.* 141. *Sm. Fl. Brit.* 492. *With.* 430. *Hull.* 100. *Jacq. Oxal.* 10. t. 5.

Oxys lutea. *Ger. em.* 1202.

IT would be unjust to deprive Dr. Berkenhout of the honour of first making this known as a British plant. His specimens were gathered near Exeter by a Mr. John Turner. Ours were sent from the same county by the Rev. Dr. Beeke, Rev. Mr. Neck, W. J. Hooker, Esq. and the Rev. J. Jervis. The celebrated authoress Mrs. Charlotte Smith has informed us of this species being found near Cuckfield, Sussex, by Mr. Fearon; and it was observed this autumn in Scotland, near Stirling, by our worthy friend Dr. Buchanan. All these authorities surely establish it as a native. It is annual, flowering from the beginning of summer to the end of autumn.

Root fibrous. Stems several, spreading widely on the ground and often taking root, somewhat branched, round, reddish, leafy, downy. Leaves alternate, though often nearly opposite, ternate, spreading; leaflets inversely heartshaped, rounded, downy. Stipulas united to the base of the footstalk. Flowerstalks axillary, each bearing 2 or 3 umbellate, declining pedicles. Flowers small, yellow. Fruit large, pyramidal. Stamens united at the base.

We have already, *p.* 762, pointed out the affinity of this genus to all the *Rutaceæ* of Jussieu, of which we have lately had further confirmation. The little white elastic *arillus* is conspicuous in this species, though of course much thinner in texture than the *arillus* of larger plants. Mr. de Jussieu himself has suggested the above affinity.



AGROSTEMMA Githago.

Corn Cockle.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* of 1 leaf, coriaceous. *Pet.* 5, with claws; their limb obtuse, undivided. *Cass.* superior, of 1 cell; the orifice with 5 teeth.

SPEC. CHAR. Hairy. Calyx reaching beyond the corolla. Petals entire, destitute of a crown.

SYN. Agrostemma Githago. *Linn. Sp. Pl.* 624. *Sm. Fl. Brit.* 493. *Huds.* 198. *With.* 431. *Hull.* 101. *Relb.* 176. *Sibth.* 145. *Abbot.* 100. *Curt. Lond. fasc.* 3. t. 27. *Mart. Fl. Rus.* t. 105. *Lychnis segetum major.* *Raii Syn.* 338.

BUT too common in corn-fields, to the ornament of which however it greatly contributes, raising its fine purple flowers to a level with the ripening ears in June and July; after which the round black seeds are either scattered upon the ground, or gathered in with the harvest. It is best eradicated by the hand before it flowers, or indeed as soon as it can be distinguished from the young corn, which is the case at a very early period.

Root small, annual. Whole herb rough with hoary ma-

746.



From a drawing published by J. L. Smith

LYCHNIS Flos-Cuculi.

*Meadow Lychnis, or Ragged Robin.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* of one leaf, oblong. *Petals* 5, with claws; their limb mostly divided. *Caps.* superior, opening with 5 teeth, of 1 or 5 cells.

SPEC. CHAR. Petals four-cleft. Fruit roundish, of one cell.

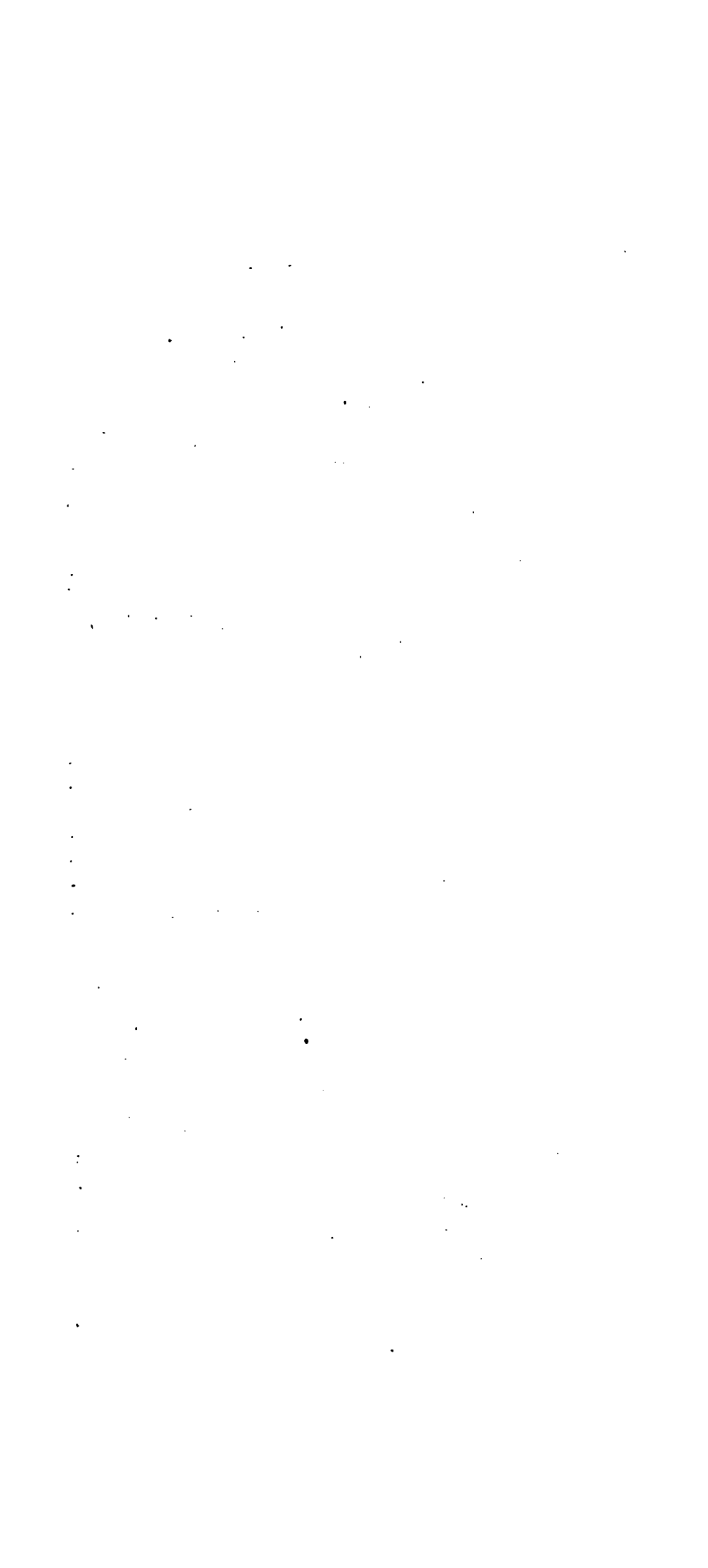
SYN. *Lychnis Flos-Cuculi.* *Linn. Sp. Pl.* 625. *Huds.* 199. *Willd.* 432. *Reichb.* 177. *Sibth.* 145. *Abbot.* 100. *Curt. Lond. fasc.* 1. t. 33.

L. plumaria sylvestris simplex. *Raii Syn.* 338.

FREQUENT in moist meadows, flowering early in June, when its pretty delicate petals are seen quivering to every breeze; but the mower's scythe soon levels them in the undistinguished heap of meadow hay.

Root fibrous, perennial. Stem erect, one or two feet high, angular, leafy, roughish with little bristles that point downwards; clammy in the upper part; sometimes branched at





LYCHNIS Viscaria.

Red German Catchfly.

DECANDRIA Pentagynia.


GEN. CHAR. *Cal.* of 1 leaf, oblong. *Petals* 5, with claws; their limb mostly divided. *Caps.* superior, opening with 5 teeth, of 1 or 5 cells.

SPEC. CHAR. *Petals* undivided. Fruit of five cells.

SYN. *Lychnis Viscaria.* *Lim. Sp. Pl.* 625. *Sm. Fl. Brit.* 494. *Huds.* 199. *With.* 433. *Hull.* 100. *Lightf.* 239.

L. Sylvestris viscosa rubra angustifolia. *Raii Syn.* 340.

A VERY rare plant wild, though common with double flowers in gardens. It still grows in several rocky spots about Edinburgh, as mentioned by Ray, and from thence Mr. Mackay sent us fresh specimens; the same accurate observer has found it at Craig Hall, near Blair gowrie, Angus-shire. It is perennial, and blooms early in the summer, when its flowers are a great ornament to its native crags, their rose-







LYCHNIS alpina.

Red Alpine Campion.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* of 1 leaf, oblong. *Petals* 5, with claws; their limb mostly divided. *Caps.* superior, opening with 5 teeth, of 1 or 5 cells.

SPEC. CHAR. Smooth. *Petals* cloven. Flowers corymbose. Leaves linear-lanceolate.

SYN. *Lychnis alpina*. *Linn. Sp. Pl.* 626. *Sm. Tr. of Linn. Soc.* v. 10. 342. *Fl. Dan.* t. 65. *Willd. Sp. Pl.* v. 2. 809. *Curt. Mag.* t. 394.

Silene Lapponica alpina, *facie viscariaë*. *Linn. Fl. Lapp.* n. 185.

AS this pretty *Lychnis* is a native of the Lapland as well as the Swiss alps, it is rather a wonder that it has not long ago been found in our island. Mr. G. Don however first made this interesting discovery, on rocks near the summit of Clova mountains in Angusshire, in 1795. The plant is there very scarce, being only found, any where, on the most elevated spots. It is perennial, flowering in June or July. We have preferred drawing Mr. Don's original specimen, though dry, to any garden one; but we have compared it with such, and with other dried specimens from Switzerland.

This species most resembles *L. Viscaria*, t. 788, from which Linnaeus, while travelling in Lapland, was at some pains to distinguish it. The present is much smaller, and not viscid, besides the essential difference of its half-divided petals. The styles are certainly five, and the petals each crowned with a cloven tooth, notwithstanding the various and contradictory accounts in the works of Linnaeus, Haller, and others, the history of which, much too long for this place, is given in the Transactions of the Linnæan Society, above quoted.—The Botanical Magazine and *Hort. Kew.* copy *Syst. Veg.* ed. 11, apparently without their authors being aware of the above confusion, nor does the description or figure in the former throw any light upon the subject.

2254



Illustration published by H. K. Lewis & Co. Ltd.



LYCHNIS dioica: flore rubro.

Red Campion.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* of 1 leaf, oblong. *Petals* 5, with claws; their limb mostly divided. *Caps.* superior, opening with 5 teeth, of 1 or 5 cells.

SPEC. CHAR. Flowers dioecious. Fruit of one cell.

SYN. *Lychnis dioica.* *Linn. Sp. Pl.* 626. *Sm. Fl. Brit.* 495. *Huds.* 199. *With.* 431. *Abbot.* 101.

α. Flowers red.

L. dioica. *Curt. Lond. fasc.* 2. *t.* 32. *Hull.* 100.

L. diurna. *Sibth.* 145. *Sym.* 112.

L. sylvestris rubello flore. *Raii Syn.* 339. *Ger. em.* 469.

SOMETIMES it happens that plants which every one well knows at first sight, are attended with much difficulty in their botanical characters, as is the case with the common Red and White Campions, both comprehended by Linnæus under his *Lychnis dioica*. We shall endeavour to illustrate them in this and the following plate.

The Red Campion is common under hedges and in other shady and rather moist places, flowering copiously in the spring, and occasionally, when it has been accidentally cropped at an early period, its flowers are observable here and there throughout the summer. The root is perennial and tapering. Herb clothed with fine soft prominent hairs, and somewhat viscid. Stem upright but weak, round, jointed, leafy, about 18 inches or 2 feet high, terminating in a forked spreading panicle. Leaves ovate, soft, acute, entire. Flowers on partial stalks, with somewhat membranous bractæas. Calyx dark red; in the male flowers tubular; in the female (which are on distinct and stronger plants) ovate; in both 10-ribbed, without intermediate veins. Petals rose-coloured, with whitish claws and 4-cleft crown, the limb cloven, and sometimes having 2 slight lateral lobes. The flowers have no smell. They are often seen double in gardens. There is a pale variety in which the stamina and pistilla are sometimes, not always, together in the same flower.



Spent's Book Published by W. B. Ewing, Boston



LYCHNIS dioica: flore albo.

White Campion.

GEN. and SPEC. CHAR. See preceding page.

β. Flowers white. *Relh.* 177.

Lychnis dioica. *Fl. Dan.* t. 792.

L. vespertina. *Sibth.* 146. *Sym.* 112. *Hull.* 100.

L. sylvestris albo flore. *Raii Syn.* 339.

THIS variety, as it is presumed to be, of *Lychnis dioica* is no less common than the red one, but differs from it in place of growth, being found in rather more exposed situations, principally open fields, flowering in June and July. The whole plant is firmer and taller than the foregoing. Leaves rather more lanceolate than ovate, thicker and less flaccid. Flowers larger, white, sometimes pale blush-coloured, diffusing a delicate sweet fragrance in an evening or before rain, but we do not find them, according to Dr. Sibthorp's account, expanded more particularly at that time, for ours were gathered at noon; nor do the differences indicated by that indefatigable botanist in the shape of the fruit appear constant to us. We dissent from him and others, who have made 2 species of these plants, very unwillingly and with great diffidence. We have thought the intermediate veins between the calyx-ribs in the female flower of this white kind, might distinguish it from the red. The form of the crown of the petals seems a little different, but experience shows that to be variable. Both organs of fructification sometimes occur in the same flower in this variety also.

As we here publish two varieties of the same species, we have not repeated the characters. Otherwise we deem it essential, in all periodical publications of this kind, that each plant should be accompanied by its essential characters, both generic and specific, in order that the work may without inconvenience be bound up according to any arrangement whatever.



Dianthus barbatus L. f. *barbatus* L.



CERASTIUM vulgatum.

*Broad-leaved Mouse-ear Chickweed.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* cloven. *Caps.* superior, of 1 cell, bursting at the top, with 10 teeth.

SPEC. CHAR. Hairy, viscid, forming tufts. Leaves ovate. Petals equal to the calyx. Flowers longer than their stalks.

SYN. *Cerastium vulgatum.* *Linn. Syst. Nat. ed.* 10. v. 2. 1039. *Sp. Pl.* 627. *Sm. Fl. Brit.* 496. *Lightf.* 240.

C. viscosum. *Huds.* 200. *With.* 433. *Hull.* 101. *Relb.* 178. *Sibth.* 147. *Abbot.* 101. *Curt. Lond. fasc.* 2. t. 35.

Alfne hirsuta Myosotis latifolia præcocior. *Raii Syn.* 348.

Myosotis arvensis hirsuta parvo flore. *Vaill. Par.* 1. 30. f. 3.

NO plants have been more generally mistaken for each other than the common *Cerastium vulgatum* and *C. viscosum*. The cause of the error is Linnæus, who misquoted Vaillant's ad-

789.



CERASTIUM viscosum.

*Narrow-leaved Mouse-ear Chickweed.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* cloven. *Caps.* superior, of 1 cell, bursting at the top, with 10 teeth.

SPEC. CHAR. Hairy, viscid, spreading. Leaves lanceolate-oblong.

SYN. *Cerastium viscosum.* *Linn. Sp. Pl.* 627. *Sm. Fl. Brit.* 497. *Lightf.* 240.

C. vulgatum. *Huds.* 200. *With.* 433. *Hull.* 101. *Relb.* 178. *Sibth.* 146. *Curt. Lond. fasc.* 2. t. 34.

Alfine hirsuta *Myosotis.* *Raii Syn.* 349.

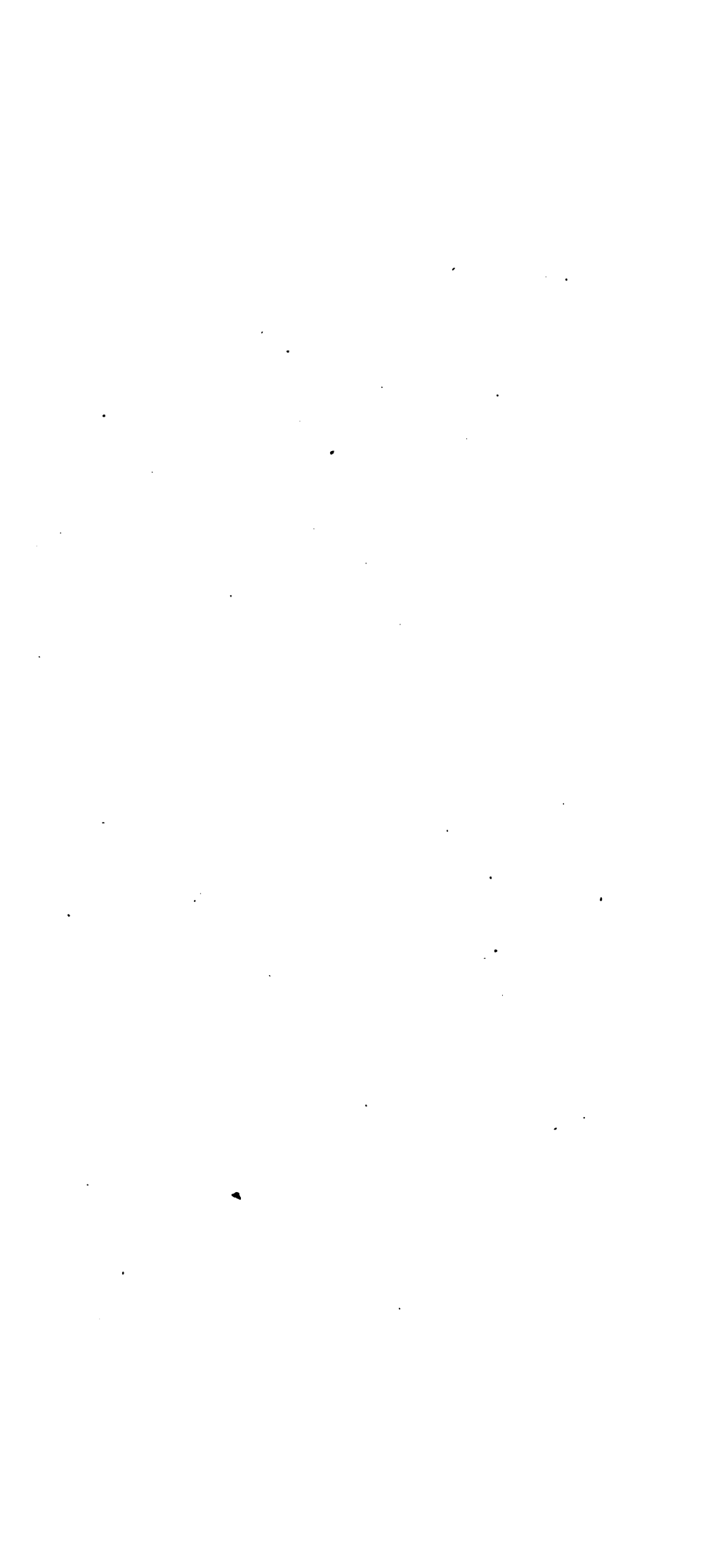
Myosotis hirsuta altera viscosa. *Vaill. Par.* t. 30. f. 1.

THIS is equally common with the *C. vulgatum*, growing in pastures, waste places, on walls, and even in moist meadows, nor is it at all more viscid than that, so that Linnæus has not been happy in the specific names of the two species. We must



Stachys recta L. f. *Stachys recta* L. f. *Stachys recta* L. f.

1061



CERASTIUM semidecandrum.

Little Mouse-ear Chickweed.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* cloven. *Caps.* superior, of 1 cell, bursting at the top, with 10 teeth.

SPEC. CHAR. Hairy, viscid. Stamina five. Petals but slightly notched.

SYN. *Cerastium semidecandrum.* *Linn. Sp. Pl.* 627. *Sm. Fl. Brit.* 497. *Huds.* 200. *With.* 435. *Hull.* 101. *Relh.* 178. *Sibth.* 147. *Abbot.* 101. *Curt. Lond. fasc. 2. t. 33.* *Dicks. H. Sicc. fasc. 8. 11.* *C. hirsutum minus, parvo flore.* *Dill. in Raii Syn.* 348. *t. 15. f. 1.*

GATHERED on walls near Battersea church in May last. It occurs frequently in waste ground and barren sandy or gravelly spots among rubbish, flowering in the early spring, after which it soon sows its seeds and withers away.

Root small, fibrous, annual. Habit of the plant most like *C. viscosum*, *t. 790*, but every part is smaller, and the herbage more frequently reddish. The stems spread at the base, and are hairy, most viscid in the upper part. Leaves ovate or oblong, the lower ones generally almost smooth. Flower-stalks longer than the calyx, bent back after flowering, but finally erect. Calyx-leaves with a conspicuous white dilated margin. Petals generally shorter than the calyx, slightly notched at the tip, sometimes cut on the side. Stamina rarely more than 5. Capsule about twice as long as the calyx, somewhat curved. Seeds of a tawny brown, granulated, compressed.

Mr. Dickson's *C. pumilum*, *Curt. Lond. fasc. 6. t. 30*, appears to me, from the examination of several living specimens, a variety only of this plant with somewhat larger and more deeply cut petals, and larger fruit, changes to which other plants of this natural order are liable from a barren soil and open sunny situation.





SAGINA ceraftoides.

Mouse-ear Pearl-wort.

TETRANDRIA Tetragynia.

GEN. CHAR. *Cal.* 4-leaved. *Petals* 4. *Caps.* with 4 cells and 4 valves.

SPEC. CHAR. Stem diffuse and dichotomous. Leaves spatulate or obovate, recurved. Foot-stalks of the ripe fruit reflexed.

SYN. *Sagina ceraftoides.* *Transf. of Linn. Soc. vol. 2.*
343.

MR. James Dickson, who discovered this plant on the sandy shores and rocks about the Firth of Forth in Scotland, flowering in June and July, laid it before the Linnæan Society in October last; and from his specimens, both wild and cultivated, Dr. Smith has drawn up a full description, printed in the 2d volume of the Society's Transactions, just about to appear.

The habit of this plant is very like that of a *Ceraftium*, but the number of the parts of fructification make it a *Sagina*, to which genus it therefore must be referred, as the genus is





CERASTIUM arvense.

Field Chickweed.

DECANDRIA Pentagynia.


GEN. CHAR. Cal. five-leaved. Petals cloven. Capsule one-celled, bursting at the top.

SPEC. CHAR. Leaves linear-lanceolate, obtuse, ciliated at the base. Corolla longer than the calyx.

SYN. Cerastium arvense. Linn. Sp. Pl. 628. Hudf. Fl. Am. 201. Willd. Bot. Arr. 478. Relb. Cant. 179.

Caryophyllus arvensis hirsutus, flore majore. Raii Syn. 348.

FREQUENTLY found in a gravelly soil in many parts of





CERASTIUM alpinum.

*Alpine Chickweed.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* cloven. *Capsule* of one cell, bursting at the top.

SPEC. CHAR. Leaves elliptical, naked, or clothed with long hairs. Panicle forked, of few flowers, furnished with bractææ. Capsule oblong, curved.

SYN. *Cerastium alpinum.* *Linn. Sp. Pl.* 628. *Huds.* 201. *With.* 434. *Fl. Dan.* t. 6.

C. latifolium. *Lightf.* 242. t. 10.

Alfines Myosotis facie, *Lychnis Alpina flore amplo niveo repens.* *Raii Syn.* 349. t. 15. f. 2.

FEW of our British plants have been less understood than *Cerastium alpinum*, and *latifolium*. We have lately received fresh wild specimens of both from Mr. Griffith of Garn, and others from Mr. Mackay of Edinburgh, and, finding them perfectly distinct, have endeavoured to ascertain their differences and synonyms.

The *C. alpinum* has a creeping perennial root, forming tufts of leafy stems, branching from the base, round, erect, from 3 to 5 inches high, simple upwards, but terminating generally in a sort of forked panicle of several flowers; in poor weak branches or stems, the flower is solitary. Leaves varying in shape and breadth, but always more or less elliptical, a little



CERASTIUM latifolium.

Broad-leaved rough Chickweed.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* cloven. *Capsule* of one cell, bursting at the top.

SPEC. CHAR. Leaves elliptical, clothed with short spreading bristles. Flower-stalks terminal, simple, mostly solitary. Capsule oval.

SYN. *Cerastium latifolium*. *Linn. Sp. Pl.* 629. *Huds.* 202. *With.* 434. *Jacq. Coll. V.* 1. 256. *t.* 20.

C. tomentosum. *Huds. ed.* 1. 176.

Alpine *Myosotis lanuginosa Alpina grandiflora*. *Raii Syn.* 349.

CERASTIUM latifolium was sent from Wales and Scotland along with *C. alpinum*, already described under *t.* 472: it flowers at the same time, and is perennial.

The stems form tufts, but are shorter and more thickly set with leaves than in that species; the leaves are broader and more obtuse, clothed (*constantly* as far as we have observed) with numerous short rigid spreading bristly hairs, various in position and direction, making a harsh kind of covering, quite different from the silky hairs of *C. alpinum*. They are also in general more thickly jointed. The flower-stalks are terminal, mostly solitary, simple, often as long as the whole stem, clothed with glandular spreading hairs, and frequently destitute of bractæ. The flowers differ but little from that species. It appears that the stem is at length protruded beyond the insertion of the flower-stalk, and may occasionally bear an autumnal flower, when the first has ripened its seed. The capsule is oval, and is not curved, shorter than that of *C. alpinum*.—We presume there is no doubt of this being the plant of Ray as above quoted, though we have seen no original specimens. It used to be referred, from Mr. Hudson's error, to the *tomentosum* of Linnæus, from which it differs widely.



Scilla maritima L.

CERASTIUM aquaticum.

Water Chickweed.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* cloven. *Capsf.* of one cell, bursting at the top.

SPEC. CHAR. Leaves heart-shaped, sessile. Flowers lateral, solitary. Fruit drooping.

SYN. *Cerastium aquaticum.* *Linn. Sp. Pl.* 629. *Huds.* 202. *Witb.* 436. *Relb.* 180. *Sibth.* 147. *Curt. Lond. fasc.* 1. t. 34.

Alfine major repens perennis. *Raii Syn.* 347.

NOT unfrequent in watery places, particularly the margins of rivers and clear ditches, among reeds and bushes, by which its weak stems are supported, flowering in July.

Root perennial, creeping. Stems 2 feet high, weak, procumbent unless supported, branched or forked, leafy, round, clothed all over with prominent glandular hairs; the bark is very brittle, the woody part tough, elastic, and tubular, as in *Stellaria media* and others of this natural family. Leaves opposite, heart-



[1535]

SPERGULA arvensis.

*Rough-seeded Corn Spurrey.**DECANDRIA Pentagynia.*

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, undivided.
Capsule superior, ovate, of 1 cell and 5 valves.

SPEC. CHAR. Leaves whorled. Stalks of the fruit reflexed. Seeds kidney-shaped, angular, rough.

SYN. *Spergula arvensis.* *Linn. Sp. Pl.* 630. *Sm. Fl. Brit.* 502. *Huds.* 202. *With.* 436. *Hull.* 102. *Relh.* 179. *Sibth.* 148. *Abbot.* 102. *Curt. Lond. fasc. 5. t. 31.*

Alsine Spergula dicta major. *Raii Syn.* 351.

VERY common in corn-fields and waste places on a sandy soil, flowering from July to September.

Root annual, small in proportion to the plant. Stems spreading, very various in luxuriance, round, branched, jointed, downy and viscid especially in their upper part. Leaves many in a whorl at each joint, linear, obtuse, occasionally smooth or downy. Panicles terminal, forked, divaricated. Flower-stalks downy, reflexed as the fruit ripens. Calyx-leaves ovate, bluntish, concave, downy at the back, membranous at the edge. Petals ovate, white, entire, scarcely exceeding the calyx in length. Stamina generally 10, sometimes 5, or some intermediate number. Styles 5, short. Capsule almost twice as long as the calyx. Seeds numerous, kidney-shaped or roundish, swelling, angular, with an obsolete (not membranous) border. When ripe they are black, and rough all over with minute tubercles or bristles.

Mr. Curtis mentions that cattle are fed with this herb, and poultry with its seeds, in Flanders, Germany and Norway. With us it is known only as a troublesome weed in sandy ground.



Plantago virginica L. (Plantain)



[1536]

arvensis.
SPERGULA pentandra. *Var.*
Smooth-seeded Corn Spurrey.

DECANDRIA *Pentagynia.*


GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, undivided.
Capsule superior, ovate, of 1 cell and 5 valves.

SPEC. CHAR. Leaves whorled. Stalks of the fruit reflexed. Stamina five. Seeds lenticular, smooth, with a membranous border.

SYN. *Spergula pentandra.* *Linn. Sp. Pl.* 690. *Abbot.* 102. *Roth. Pl. Germ. v. 2.* 505.

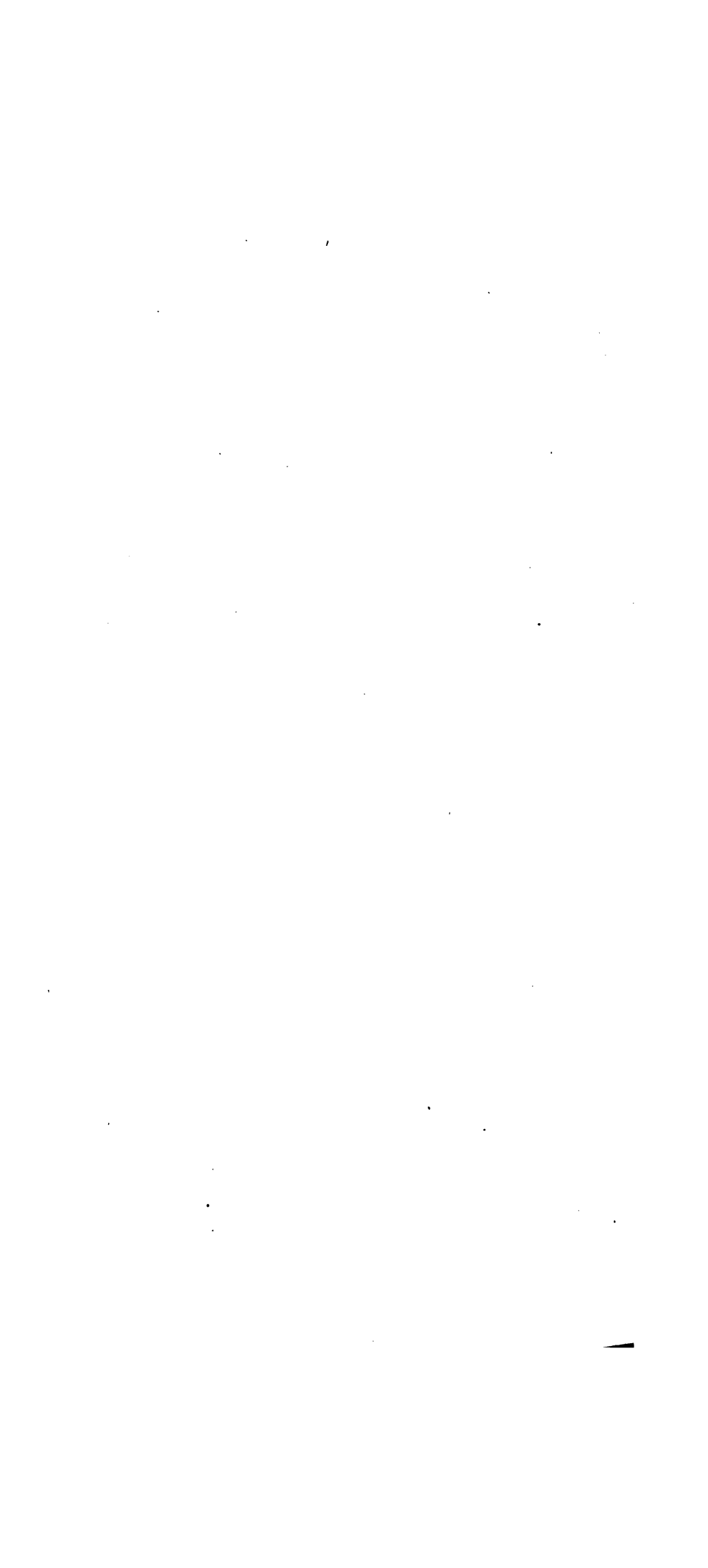
S. annua, semine foliaceo nigro, circulo membranaceo albo cincto. *Dill. in Raii Syn.* 351.

WE are obliged to Mr. John Shepherd, the able Curator of the Liverpool garden, for pointing out this plant to us in August last on several sandy spots near that town, where it grows intermixed with *S. arvensis*, from which it is not to be known till the flowers and seeds are examined. We do not find any difference in the size of the plants, or number of the leaves. Perhaps the flowers of this are rather smaller, and





Decid. Moss Polypodium sp. var. glaucum L.



SPERGULA nodosa.

Knotted Spurrey.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, undivided.
Capsule superior, ovate, of 1 cell and 5 valves.

SPEC. CHAR. Leaves opposite, awl-shaped, smooth;
the upper ones clustered. Calyx without nerves.

SYN. *Spergula nodosa.* *Linn. Sp. Pl.* 630. *Sm. Fl.*
Brit. 503. *Huds.* 203. *With.* 437. *Hull.* 102.
Relb. 181. *Sibth.* 148. *Abbot.* 103. *Curt. Lond.*
fasc. 4. *t.* 34.

Alfne palustris foliis tenuissimis, seu Saxifraga pa-
lustris anglica. *Raii Syn.* 350.

THIS pretty plant is found in wet spots upon sandy heaths and commons, but not very frequently. It is perennial, flowering in July and August. The seeds are not always perfected.

Root fibrous. Herb very smooth. Stems spreading, and generally prostrate, numerous, slender, but little branched, clothed with many pairs of awl-shaped united leaves, which

694.





S P E R G U L A saginoides.

Smooth Awl-shaped Spurrey.

DECANDRIA Pentagynia.

GEN. CHAR. Cal. 5-leaved. Petals 5, undivided.

Capsule superior, ovate, of 1 cell and 5 valves.

SPEC. CHAR. Leaves opposite, awl-shaped, pointless, naked. Flower-stalks solitary, very long, smooth.

SYN. *Spergula saginoides*. Linn. *Sp. Pl.* 631. Sm. *Fl. Brit.* 504. *Hull. ed.* 2. 136.

Alsine foliis gramineis sæpè fasciculatis, glabris, pedunculis longis nudis unifloris. Gmel. *Sib. v.* 4. 157. *Herb. Linn.*

WE received this from the late Mr. J. Mackay, who gathered it on Ben Lawers in 1794. Mr. G. Don appears to have found it previously on Mal-ghyrdy.

The root is fibrous and perennial. Whole plant quite smooth, in which last respect, and the want of a bristly point to the leaves, it essentially and constantly differs from *S. subulata*, t. 1082. The stems are decumbent at their lower part, then erect, mostly branched, leafy, round, with rather tumid joints. Leaves awl-shaped, acute, joined at their base. Flower-stalks terminal, solitary, erect, round, naked, very smooth, often as long as the stems, each bearing a rather drooping white flower, somewhat larger than those of *S. subulata*. Calyx-leaves ovate, obtuse, even, with hardly any ribs, gibbous at their base. Petals roundish, scarcely so long as the calyx. Stamens 10, about as long as the petals. Capsule ovate, of 5 valves, twice as long as the calyx. Seeds roundish kidney-shaped, brown, smooth, not bordered.

Professor Swartz describes but 5 stamens in his *S. saginoides*. Whether ours be the same or not, we are certain it is that of Linnæus.



See also published by J. Sowerby, London.

SPERGULA subulata.

Ciliated Awl-shaped Spurrey.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-leaved. *Petals* 5, undivided.
Capsule superior, ovate, of 1 cell and 5 valves.

SPEC. CHAR. Leaves opposite, awl-shaped, fringed,
 tipped with a bristly point. Flower-stalks solitary,
 very long, somewhat hairy.

SYN. *Spergula subulata.* *Sm. Fl. Brit.* 505. *With.*
 436. *Hull.* 102. *Swartz. Aët. Holm. ann.* 1789.
 45. *t.* 1. *f.* 3.

S. laricina. *Hudsf.* 203. *Lightf.* 244.

S. faginoides. *Curt. Lond. fasc.* 4. *t.* 35.

Sagina procumbens β. *Linn. Sp. Pl.* 185.

Saxifraga graminea pusilla, foliis brevioribus crassioribus et succulentioribus. *Raii Syn.* 345.

It appears from original authorities that Linnæus confounded this plant with *Sagina procumbens*; hence it is not to be found properly characterized in any of his own publications.—Mr. Hudson, led by the specific character of *Spergula laricina*, mistook it for that species, how erroneously may be seen by the *Plant. Ic. ex Herb. Linn. t.* 18. Dr. Swartz and Professor Willdenow have at length properly defined it.

This species grows on sandy barren heaths, flowering from



J. 104. 10 10 10





